W R GRACE & CO

FORM 10-K
(Annual Report)

Filed 03/02/09 for the Period Ending 12/31/08

Address	7500 GRACE DRIVE COLUMBIA, MD 21044
Telephone	410 531 4000
CIK	0001045309
Symbol	GRA
SIC Code	2800 - Chemicals & Allied Products
Industry	Chemical Manufacturing
Sector	Basic Materials
Fiscal Year	12/31

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Financial Supplement W. R. GRACE & CO. ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2008

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2008 **Commission file number 1-13953**

W. R. GRACE & CO.

Incorporated under the Laws of the **State of Delaware**

I.R.S. Employer Identification No. **65-0773649**

7500 Grace Drive, Columbia, Maryland 21044-4098
410/531-4000

Securities registered pursuant to Section 12(b) of the Exchange Act:

Title of each class	Name of each exchange on which registered
Common Stock, $.01 par value	New York Stock Exchange, Inc.
Preferred Stock Purchase Rights	

Securities registered pursuant to Section 12(g) of the Exchange Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Exchange Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulations S-K is not contained herein and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ (Do not check if a smaller reporting company) Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of W. R. Grace & Co. voting and non-voting common equity held by non-affiliates as of June 30, 2008 (the last business day of the registrant's most recently completed second fiscal quarter) based on the closing sale price of $23.49 as reported on the New York Stock Exchange was $1,432,123,521.*

At January 31, 2009, 72,157,518 shares of W. R. Grace & Co. Common Stock, $.01 par value, were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

None.

* *Based on 72,151,518 shares of outstanding Grace Common Stock, $.01 par value, as of June 30, 2008. Excludes 11,184,148 shares of outstanding W. R. Grace & Co. ("Grace") Common Stock held by directors, executive officers and stockholders whose beneficial ownership exceeds 10% of the outstanding shares of Grace Common Stock, as listed, in each case, in the Grace Annual Report on Form 10-K as filed with the SEC on February 29, 2008. Exclusion of shares held by any person should not be construed to indicate that such person possesses the power, direct or indirect, to direct or cause the direction of the management or policies of Grace, or that such person is controlled by or under common control with Grace.*

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Grace®, the Grace® logo and, except as otherwise indicated, the other product names used in the text of this report are trademarks, service marks, and/or trade names of operating units of W.R. Grace & Co. or its affiliates and/or subsidiaries. Responsible Care® is a trademark, registered in the United States and/or other countries, of Chemical Manufacturers Association, Inc. OCR® is a trademark, registered in the United States and/or other countries, of Chevron Intellectual Property, LLC.

Unless the context otherwise indicates, in this document the terms "Grace," "we," "us," "our" or "the company" mean W.R. Grace & Co. and/or its consolidated subsidiaries and affiliates. Unless otherwise indicated, the contents of websites mentioned in this report are not incorporated by reference or otherwise made a part of this report.

PART I

Item 1. BUSINESS

BUSINESS OVERVIEW

W. R. Grace & Co. is engaged in the production and sale of specialty chemicals and specialty materials on a global basis through its two operating segments, Grace Davison and Grace Construction Products. We entered the specialty chemicals industry in 1954, when we acquired both the Dewey and Almy Chemical Company and the Davison Chemical Company. During the 1980s and 1990s, we divested a substantial number of businesses that were not consistent with our business strategy. Grace is the successor to a company that originated in 1854 and originally became a public company in 1953.

Grace, along with 61 of its United States subsidiaries and affiliates, has filed voluntary petitions for reorganization under Chapter 11 of the United States Bankruptcy Code and, since 2001, has been subject to the jurisdiction of the United States Bankruptcy Court for the District of Delaware.

In the fourth quarter of 2007, we realigned our reportable operating segments to reflect the transfer of our packaging technologies product line to the Grace Davison operating segment. Our previous Grace Performance Chemicals operating segment was renamed "Grace Construction Products" as a result of the transfer. All segment information contained herein has been restated to reflect this realignment.

Grace Davison markets its products primarily to a wide range of industrial customers, including those in the energy and refining industry, consumer, industrial and packaging industries, petro-/bio- chemical industry and the pharmaceutical and life sciences industry. Grace Davison includes the following product groups:

- Refining Technologies, which includes:
  - fluid catalytic cracking, or FCC, catalysts, that help to "crack" the hydrocarbon chain in distilled crude oil to produce transportation fuels, such as gasoline and diesel fuels, and other petroleum-based products; and FCC additives used to reduce sulfur in gasoline, maximize propylene production from refinery FCC units, and reduce emissions of sulfur oxides, nitrogen oxides and carbon monoxide from refinery FCC units, and
  - hydroprocessing catalysts, marketed through our Advanced Refining Technologies, LLC joint venture with Chevron Products Company, in which Grace holds a 55% economic interest, that are used in process reactors to upgrade heavy oils into lighter, more useful products by removing impurities such as nitrogen, sulfur and heavy metals, allowing less expensive feedstocks to be used in the petroleum refining process;
- Materials Technologies which includes:
  - silica-based and silica-alumina-based engineered materials used in:
    - industrial applications, such as rubber and tires, precision investment casting, refractory, insulating glass windows, and drying applications, fulfilling various functions such as reinforcement, high temperature binding and moisture scavenging,
    - consumer applications, as a free-flow agent, carrier or processing aid in food and personal care products; as a toothpaste abrasive; and for the processing and stabilization of edible oils and beverages, and
    - coatings and print media applications, consisting of functional additives that: provide matting effects and corrosion protection for industrial coatings, enable enhanced media and paper quality in ink jet coatings, and act as a functional filler and retention aid in paper, and
  - sealants and coatings used in rigid food and beverage packaging, including can and closure sealants used to seal and enhance the shelf life of can and bottle contents, and

coatings for cans and closures that prevent metal corrosion, protect package contents from the influence of metal and ensure proper adhesion of sealing compounds and technologies designed to reduce off-taste effects and extend the shelf-life of packaged products; and

- Specialty Technologies, which includes:
  - polyolefin catalysts and catalyst supports that are essential components in the manufacture of polyethylene and polypropylene resins, and other chemical catalysts and process technologies used in a variety of industrial, environmental and consumer applications, and
  - silica-based materials, chromatography columns, instruments, consumables and accessories for life sciences applications.

Grace Davison accounted for approximately 65% of our 2008 sales.

Grace Construction Products, or GCP, produces and sells specialty construction chemicals and specialty building materials, including:

- concrete admixtures and fibers used to modify the rheology, improve the durability and enhance various other properties of concrete, mortar, masonry and other cementitious construction materials;
- additives used in cement processing to improve energy efficiency in manufacturing, enhance the characteristics of finished cement and improve ease of use;
- building materials used in commercial and residential construction and renovation to protect buildings and civil engineering structures from water, vapor and air penetration; and
- fireproofing materials used to retard the spread of fire in buildings.

Grace Construction Products accounted for approximately 35% of our 2008 sales.

Our principal executive offices are located at 7500 Grace Drive, Columbia, Maryland 21044, telephone (410) 531-4000. As of December 31, 2008, we had approximately 6,300 full-time employees worldwide.

Our strategy is to seek increased enterprise value by profitably growing our specialty chemicals and materials businesses in the global marketplace and achieving high levels of efficiency. To achieve these objectives, we plan to:

- invest in research and development activities, with the goal of introducing new high-performance, technically differentiated products and services while continuing to enhance manufacturing processes and operations;
- expand sales and manufacturing into geographic areas with emerging market economies, including China, India, Eastern Europe, Latin America, Africa and the Middle East;
- pursue selected acquisitions and alliances that complement our current product offerings or provide opportunities for faster penetration of desirable market or geographic segments; and
- continue our commitment to process and productivity improvements and cost-management, such as rigorous controls on working capital and capital spending, integration of functional support services worldwide, and programs for supply chain management, which include both procurement and materials management.

CHAPTER 11 FILING

On April 2, 2001, Grace, along with 61 of our United States subsidiaries and affiliates, filed voluntary petitions for reorganization under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the District of Delaware. The cases are being jointly administered

under case number 01-01139. Our non-U.S. subsidiaries and certain of our U.S. subsidiaries were not included in the bankruptcy filing.

Background of Chapter 11

A bankruptcy filing under Chapter 11 of the United States Bankruptcy Code is generally a voluntary action taken by a debtor to resolve financial problems such as major liabilities. Chapter 11 gives a debtor the chance to restructure its finances so that it may continue to operate, provide its employees with jobs and pay its creditors. Chapter 11 can be used by debtors that are faced with large numbers of product liability lawsuits in multiple jurisdictions to provide a practical way to address the potential liabilities under the supervision of one court. A Chapter 11 filing generally stops all lawsuits against a debtor and prevents creditors from taking action to enforce claims or collect any monies or property that might be owed at the time of filing.

Chapter 11 permits a debtor to define and resolve its liabilities under a court-supervised process generally referred to as a reorganization. Unlike a Chapter 7, or liquidation bankruptcy, which results in the sale or distribution of all of the assets of a business, Chapter 11 reorganization permits a debtor to continue its normal business operations. Existing management may continue to manage the debtor's operations during the reorganization. As a debtor-in-possession, a debtor is able to do business with suppliers and customers in a routine manner. Certain other activities, including transactions outside the ordinary course of business, generally require specific approval of the bankruptcy court.

After a debtor files Chapter 11, one or more official committees that represent the interests of general unsecured creditors, other creditors and stockholders may be appointed. Normally these committees and their respective advisors are actively involved in the process to monitor the bankruptcy and protect the interests of their respective constituencies. The fees and expenses of these committees and advisors are paid by the debtor.

The Chapter 11 process generally ends when the bankruptcy court approves a plan of reorganization for the debtor. In cases similar to ours with complex asbestos liabilities, debtors have taken several years to complete the Chapter 11 process.

Grace Chapter 11 Filing

We voluntarily entered Chapter 11 to resolve comprehensively the nearly 130,000 asbestos personal injury and property damage claims against us, as well as any future demands which may be asserted. These claims and demands relate to past products and processes that involved asbestos, a mineral formerly used widely for many decades in building and other commercial products. Prior to 2000, we were able to resolve asbestos-related claims through direct negotiations and litigation, paying over $2 billion in claims and legal costs over a 20-year period. In most of the personal injury lawsuits, we are one of many defendants. In 2000 and the first quarter of 2001, the litigation environment changed with an unexpected 81% increase in personal injury claims filed against us, which we believe was caused by a surge in unmeritorious claims. We also became a defendant in class action lawsuits alleging damages from Zonolite® Attic Insulation, or ZAI, a former attic insulation product. Trends in claims filing and settlement demands showed no sign of returning to historic levels and these unfavorable trends were exacerbated by the bankruptcy filings of several of our co-defendants in asbestos personal injury litigation. These trends greatly increased the risk that we would not be able to resolve our pending and future asbestos-related claims under the state court system.

After a thorough review of these developments, our Board of Directors concluded that a federal court-supervised bankruptcy process provided the best forum available to achieve fairness in resolving these claims and demands. On April 2, 2001, we, along with 61 of our United States subsidiaries and affiliates, filed voluntary petitions for reorganization under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the District of Delaware, referred

to herein as the Bankruptcy Court. Since that time, we have been subject to the jurisdiction of the Bankruptcy Court.

We are currently operating as a debtor-in-possession under court protection from creditors and claimants. We believe that our bankruptcy filing will permit a comprehensive resolution of the claims against us, while preserving the inherent value of our businesses. As a consequence of our bankruptcy filing, pending litigation against us is generally stayed (subject to certain exceptions in the case of governmental authorities), and no party may take any action to realize its pre-petition claims except pursuant to an order of the Bankruptcy Court. Since our bankruptcy filing, the Bankruptcy Court has approved all motions necessary for us to conduct normal business activities.

Four committees have been appointed in the bankruptcy cases, two representing asbestos claimants, a third representing other unsecured creditors and a fourth representing shareholders. These committees, a legal representative of future asbestos personal injury claimants and a legal representative of future asbestos property damage claimants, have the right to be heard on all matters that come before the Bankruptcy Court and are playing important roles in the bankruptcy cases. We are required to bear certain costs of the committees and of the future asbestos claimants' representatives, including those of their counsel and financial advisors.

See disclosure in this Report in Item 8 (Financial Statements and Supplemental Data) in the Financial Supplement under Note 2 (Chapter 11—Related Information) and Note 3 (Asbestos—Related Litigation) to the Consolidated Financial Statements for a description of our proposed joint plan of reorganization and the current status of our Chapter 11 cases.

PRODUCTS AND MARKETS

Specialty Chemicals and Specialty Materials Industry Overview

Specialty chemicals and specialty materials are high-value-added products used as catalysts, intermediates, components, protectants or additives in a wide variety of products and applications. They are generally produced in relatively small volumes (compared with commodity chemicals) and must satisfy well-defined performance requirements and specifications. Specialty chemicals and specialty materials are often critical components of end products, catalysts for the production of end products or components used in end products. Consequently, they are tailored to meet customer needs, which generally results in a close relationship between the producer and the customer.

We focus our business on the following, which we believe are important competitive factors in the specialty chemicals and specialty materials industry:

- value-added products and services, sold at competitive prices;
- customer service, including rapid response to changing customer needs;
- technological leadership (resulting from investment in research and development and technical customer service); and
- reliability of product and supply.

We believe that our focus on these competitive factors enables us to deliver increased value to customers and competitive operating margins notwithstanding the increased customer service and research and development costs that this focus entails.

Grace Davison Operating Segment

Grace Davison principally applies silica, alumina, zeolite and rubber and lattice technology in the design and manufacture of products to create significant value for our diverse customer base. Our customers include major oil refiners, plastics and chemical manufacturers, users of product packaging, consumer product manufacturers and pharmaceutical companies. We believe that our technological expertise provides a competitive advantage, allowing us to quickly design products and materials that help our customers create value in their markets.

The following table sets forth Grace Davison sales of similar products as a percentage of Grace total revenue.

	2008		2007		2006	
	Sales	% of Grace Revenue	Sales	% of Grace Revenue	Sales	% of Grace Revenue
			(In millions)			
Refining Technologies	$1,099.1	33.1%	$ 971.1	31.2%	$ 859.1	30.4%
Materials Technologies	694.8	20.9%	663.5	21.3%	592.8	21.0%
Specialty Technologies	374.7	11.3%	374.6	12.0%	345.4	12.2%
Total Grace Davison Revenue	**$2,168.6**	**65.3%**	**$2,009.2**	**64.5%**	**$1,797.3**	**63.6%**

The following table sets forth Grace Davison sales by region as a percentage of Grace Davison total revenue.

	2008		2007		2006	
	Sales	% of Grace Davison Revenue	Sales	% of Grace Davison Revenue	Sales	% of Grace Davison Revenue
			(In millions)			
North America	$ 645.9	29.8%	$ 578.4	28.8%	$ 599.9	33.4%
Europe Africa*	913.4	42.1%	915.6	45.6%	761.1	42.4%
Asia Pacific	434.7	20.0%	362.7	18.0%	324.4	18.0%
Latin America	174.6	8.1%	152.5	7.6%	111.9	6.2%
Total Grace Davison Revenue	**$2,168.6**	**100%**	**$2,009.2**	**100%**	**$1,797.3**	**100%**

* Includes the Middle East.

Refining Technologies

FCC Catalysts

We are a global leader in developing and manufacturing FCC catalysts and additives that enable petroleum refiners to increase profits by improving product yields and quality. Our FCC products also enable refiners to reduce emissions from their FCC units and reduce sulfur content in the gasoline that they produce.

Oil refining is a highly specialized discipline, and FCC catalysts must be tailored to meet local variations in crude oil and a refinery's product mix. We work regularly with customers to help them find the most appropriate catalyst formulations for their changing needs. We are dependent on the economics of the petroleum industry, specifically, the impacts of demand for transportation fuels and petrochemical products and crude oil supply, which affect the extent to which our customers utilize the available capacity of their FCC units. In general, as a refinery utilizes more of its capacity, it needs a disproportionately greater amount of FCC catalyst.

Refinery feedstocks vary in quality from sweet to heavy crude oil. Sweet crude feedstocks are more expensive than heavy crude and yield a greater proportion of high-value petroleum products. They also yield a lower proportion of residual oil, or "resid," which is generally the lowest-value feedstock contained in crude oil. Although heavy crude feedstocks with high resid content are less expensive than higher quality feedstocks, the processing of high resid feedstocks is more difficult because of their relatively high metals, nitrogen and sulfur contamination and higher boiling points. Refiners have increased their efforts to maximize the yield from resid feedstocks. We have designed our MIDAS®, IMPACT®, NEKTOR™, and NOMUS™ product portfolios to enable our customers to increase the efficiency and yield of resid refining.

Due to increased volatility in refinery feedstock prices and the recent high price of refinery feedstocks, over the past few years, refiners have increased their efforts to maximize the yield from resid feedstocks. We have designed our MIDAS®, IMPACT®, NEXTOR™, and NOMUS™ product portfolios to enable our customers to increase the efficiency and yield of resid refining.

As a result of the increase in the relative price of diesel fuel as compared to gasoline, refiners are maximizing the yield of light cycle oil, a component of diesel fuel, from their FCC units. We have designed our MIDAS®-300 and DieseliseR products to enable our customers to increase the yield of light cycle oil from refinery FCC units.

Many U.S. petroleum refiners have entered into consent decrees with the U.S. Environmental Protection Agency under which the refiners have agreed to reduce emissions of nitrogen oxides and sulfur oxides. The European Union has also imposed requirements on refineries with respect to nitrogen oxides and sulfur oxides emissions. FCC units are generally the largest emitters of these pollutants in a refinery. Our additives are designed to assist refineries in meeting their obligations to reduce these pollutants. Our Super DESOX® additive reduces sulfur oxides emissions from commercial FCC units. Our XNOx® and DENOX® additives are designed to achieve reductions in nitrogen oxides emissions comparable to those obtained from the capital-intensive alternatives available to a refinery.

Global economic growth, especially in emerging countries, has increased the demand for plastics. As a result, our refinery customers have sought increased profits from petrochemicals by increasing the yield of propylene from their FCC units. Our zeolite-based technology, including our OlefinsMax® and OlefinsUltra® products, is designed to maximize the propylene output of FCC units.

In recent years, many countries and regions, including the U.S., European Union and China have imposed or increased the regulatory limitations on the sulfur content of gasoline and diesel fuel. We have developed a portfolio of products designed to assist refiners in meeting their gasoline sulfur reduction targets including our D-PriSM® and GSR®-5 additives and our SuRCA® and Neptune™ catalyst families.

Competition in FCC catalysts and additives is based on technology, product performance, customer service and price. Our principal FCC catalyst competitors are Albemarle and BASF which, with Intercat, are also principal competitors in FCC additives. We also have multiple regional competitors for FCC catalysts and additives.

Hydroprocessing Catalysts

We market hydroprocessing catalysts through Advanced Refining Technologies, LLC, or ART, our joint venture with Chevron Products Company. We established ART to combine our technology with that of Chevron and to develop, market and sell hydroprocessing catalysts to customers in the petroleum refining industry worldwide.

As discussed above, our business is dependent on the economics of the petroleum industry. Refineries increasingly use feedstocks that have high resid content. We are a leading supplier of hydroprocessing catalysts designed for processing these feedstocks. We offer fixed-bed, on-stream catalyst replacement (OCR®), ebullating bed and distillate products.

We also offer a full line of catalysts used in processing ultra-low sulfur content gasoline and diesel fuel, including our SmART Catalyst System® and ApART™ catalyst system, that are customized for individual refiners. These products are designed to help refiners meet their obligations to reduce sulfur content in their products.

Competition in the hydroprocessing catalyst industry is based on technology, product performance, customer service and price. Albemarle and Criterion are our leading global competitors in hydroprocessing catalysts. We also have multiple regional competitors.

Materials Technologies

We market silica-based and silica-alumina-based functional additives and process aids, such as silica gel, colloidal silica, zeolitic adsorbents, precipitated silica and silica-aluminas, for a wide variety of uses, and formulations used in food and beverage packaging, such as closure sealants and can coatings and sealants, as follows:

Application	Use	Key Brands
Industrial	Reinforcing agents for rubber and tires	PERKASIL®
	Inorganic binders and surface smoothening aids for precision investment casting and refractory applications	LUDOX®
	Adsorbents for dual pane windows and industrial applications, desiccant granules, beads, powders and bags and polyurethane moisture scavengers	PHONOSORB®, PHONOSORB MTX®, SYLOBEAD®, SYLOSIV®, CRYOSIV®, SAFETYSORB®
	Chemical metal polishing aids and formulations for CMP/electronics applications	LUDOX®, PoliEdge®
Consumer	Toothpaste abrasives and thickening agents, free-flow agents, anticaking agents, tabletting aids, cosmetic additives and flavor carriers	SYLODENT®, SYLOID® FP™, SYLOBLANC®, ELFADENT®, SYLOID®, SYLOSIV®
	Edible oil refining agents, beer stabilizers and clarification aids for beer, juices and other beverages	DARACLAR®, TriSyl®
Coatings & Print Media	Matting agents, anticorrosion pigments, TiO2 extenders and moisture scavengers for paints and lacquers	SYLOID®, SHIELDEX®, SYLOSIV®, SYLOWHITE™
	Additives and formulations for matte, semi-glossy and glossy ink receptive coatings on high performance ink jet papers, photo paper, and commercial wide-format print media	SYLOJET®, DURAFILL®, LUDOX®
	Paper retention aids, functional fillers, paper frictionizers	DURAFILL®, LUDOX®
Packaging	Can sealants for rigid containers, that ensure a hermetic seal between the lid and the body of beverage, food, aerosol and other cans	DAREX®
	Sealants for metal and plastic bottle closures that are used on pry-off and twist-off metal crowns, as well as roll-on pilfer-proof and plastic closures to seal and enhance the shelf life of glass and plastic bottles and jars used in beverage and food applications	DAREX®, DARAFORM®, DARASEAL®, DARABLEND®, Sincera®, Celox™
	Coatings for metal packaging that are used in the manufacture of cans and closures to protect the metal against corrosion, protect the contents against the influences of metal, ensure proper adhesion of sealing compounds to metal surfaces, and provide base coats for inks and for decorative purposes	DAREX®, Apperta®, Sistiaga™
	Oxygen scavenging closure sealants and moisture scavenging silica sachets, polymeric desiccants and desiccants for bottlestopper applications	Celox™, SYLOSORB™, SAFETYSORB®

Our products are integrated into our customers' manufacturing processes and, when combined with our technical support, can increase the efficiency of their processes. By working closely with our customers, we help them to react quickly to the changing needs of brand owners and their other customers. We focus on high-growth markets and seek to develop and introduce new products that can add additional value to the current and anticipated product offerings of our customers. For example, our customers have incorporated our products into higher-resolution print media, active packaging, with oxygen or moisture scavenging functionality, less abrasive, high cleaning toothpastes and technologies that are friendly to the environment such as water-based and VOC-compliant coatings, green tires with less friction resistance and non-toxic anticorrosion protection. Our packaging technologies products are designed to address major industry trends such as flexible and lighter weight packaging, lower energy consumption, personal convenience, and highly individualized packaging. We seek to capitalize upon our innovation, customer service, worldwide infrastructure and expertise in global regulatory compliance (including food law compliance) to enhance our growth, especially in emerging regions.

Our Materials Technologies product group is global, with more than 50% of our sales outside of the U.S. Our major competitors include PQ/INEOS, Degussa, UOP, Altana, PPG, Akzo Nobel and Valspar that, in each case, also sell their products on a worldwide basis. Competition is generally based on product performance and reliability, as well as additional value added features to address the needs of our customers, end-users and brand owners.

Specialty Technologies

Specialty Catalysts and Process Technologies

We are a leading provider of catalyst systems and catalyst supports to the polyolefins industry for a variety of polyethylene and polypropylene process technologies. These types of catalysts are used for the manufacture of polyethylene and polypropylene resins used in products such as plastic film, high-performance plastic pipe and household containers. We use a combination of proprietary catalyst and support technology, as well as technology licensed from third parties, to provide unique catalyst-based solutions to industry, and to provide a broad technology portfolio for enhancing collaboration opportunities with technology leaders.

Our Magnapore® polymerization catalyst is used to produce high performance polyethylene in the slurry loop process for pipe and film applications. POLYTRAK® polymerization catalyst, our newest family of products for polypropylene customers, is designed to achieve improved polymer performance, particularly for impact-resistant applications such as automobile bumpers.

Our Sylobloc® polymer additives for producers and processors of plastic products prevent layers of polymer film from sticking together, improve dispersement of pigments and ease removal from molds.

Our renewables product line draws upon our expertise in catalysis and separations to develop and provide technologies for purification, drying, and biofeedstock conversion, including our EnSieve® desiccants for ethanol dehydration and EnPure® adsorbents for biodiesel purification. Growth in our renewables business is driven by sales into ethanol dehydration and bio-diesel purification applications as a result of government mandates and escalating fuel prices. Our products provide customers with improved yields and process efficiencies.

Our Davicat® standard and customized catalysts offer a wide range of chemical and physical properties based on our material science technology for supported catalysts and biotechnology applications such as nylon and artificial sweeteners. Our Raney® nickel, cobalt and copper hydrogenation and dehydrogenation catalysts are used for the synthesis of organic compounds for the fibers, pharmaceuticals, plastics, perfumes, soaps, color couplers and petroleum industries.

Our Sylobead® process adsorbents are used in petrochemical and natural gas processes for such applications as ethylene-cracked-gas-drying, natural gas drying and sulfur removal.

The specialty catalyst industry is technology-intensive and suppliers must provide products formulated to meet customer specifications. There are many manufacturers of polyolefin and other specialty catalysts including PQ/INEOS, Albemarle, LyondellBasell, Univation and Sud Chemie, and most sell their products worldwide.

Discovery Sciences

We market an array of products for the life science, pharmaceutical, environmental, anesthesiology, biofuels, plastic, polymer, chemical, petrochemical, food, beverage, forensic, educational, nutraceutical and biotechnology industries including:

Products	Key Brands
Flash chromatography instruments, liquid and gas chromatography columns, high performance liquid chromatography (HPLC) detectors and other chromatography products including pumps and gas generators	Vydac®, Alltech®, and MODcol® Reveleris™, VisionHT™
Chromatography consumables and accessories including solid phase extraction (SPE) cartridges, vials, syringes, standards, and thin layer chromatography (TLC) plates	Prevail™, Maxi-Clean™, GracePure™, Flexit™
Specialty media for preparatory and process chromatography used by life sciences, food, beverage and chemical manufacturers	Davisil®, Vydac®
CO_2 adsorbents for medical, marine, industrial and rescue applications	Sodasorb®

Our chromatography products are used in a wide range of applications, including drug discovery and purification, for the pharmaceutical and biotechnology industries, environmental analysis, forensics, petrochemical analysis and the manufacture of food, cosmetics, vitamins and biofuels. We also market chromatography consumables and analytical and preparative columns packed with our specialty media. We can modify the base silica and surface chemistry for analytical, preparative and process scale customers in order to enhance our product performance for their unique applications.

Our Discovery Sciences products compete on the basis of product quality, distinct technology and customer support. Competition for these products is highly fragmented with a large number of companies that sell their products on a global and regional basis, although a number of companies, such as Waters Corporation, Agilent Technologies and Thermo-Fisher, have a substantial global position and a relatively large installed customer base.

Manufacturing

Our Grace Davison products are manufactured by a network of globally-coordinated plants that are positioned to service our customers regionally. Our integrated planning organization is responsible for the effective utilization of our manufacturing capabilities. Our Discovery Sciences product line has its own integrated planning organization. Our packaging products are manufactured in both large facilities to permit economies of scale and a network of smaller operations that enable customization to local market conditions.

Marketing/Sales

We use a global organization of technical professionals with extensive experience in refining processes, catalyst development, and catalyst applications to market our Refining Technologies catalysts and additives. These professionals work to tailor our technology to the needs of each specific customer. We generally negotiate prices for our refining catalysts because our formulations are specific to the needs of each customer and each customer receives special attention and technical service. Due to the current demand for hydroprocessing catalysts, we generally sell these products through long-term supply agreements with our geographically diverse customer base.

We use country-based direct sales forces that are dedicated to each product line and backed by application-specific technical customer service teams to market our Materials Technologies and Discovery Sciences products. Our sales force seeks to develop long-term relationships with our customers and focuses on consultative sales, technical support and key account growth programs. To ensure full geographic coverage, our direct sales organization is further supplemented, especially with respect to our Discovery Sciences products, by a network of agents and distributors.

We use a global direct sales force for our Specialty Catalysts and Process Technologies products that seeks to maintain close working relationships with our customers. These relationships enable us to cooperate with major polymer and chemical producers to develop catalyst technologies that complement their process developments. We have geographically distributed our sales and technical service professionals to make them responsive to the needs of our geographically diverse customers. We typically operate under long-term contracts with our customers.

Our marketing and research and development functions operate globally. We offer web-based support, including technical service, literature access, customer feedback tools, and process design formulas to assist our customers in determining their needs for our products.

Seasonality does not have a significant overall effect on our Grace Davison operating segment. However, sales of FCC catalysts tend to be lower in the first calendar quarter prior to the shift in production by refineries from home heating oil for the winter season to gasoline production for the summer season. FCC catalysts and ebullating-bed hydroprocessing catalysts are consumed at a relatively steady rate and are replaced regularly. Fixed-bed hydroprocessing catalysts are consumed over a period of years and are replaced in bulk in an irregular pattern. Since our customers periodically shut down their refining processes to replace fixed-bed hydroprocessing catalysts in bulk, our hydroprocessing catalyst sales to any customer can vary substantially over the course of a year and between years based on that customer's catalyst replacement schedule. Our packaging products and some of our construction-related products such as insulated glass desiccants are affected by seasonal and weather-related factors including the consumption of beverages, the size and quality of food crops and the level of construction activity. These impacts are softened by the global nature of this product line.

Raw Materials

The principal raw materials for Grace Davison products include caustic, alumina, rare earths, nickel, aluminum, cobalt, kaolin, molybdenum, sodium aluminate, sodium silicate, resins, rubber and lattices (including certain food-grade raw materials). Multiple suppliers are generally available for each of these materials; however some of our raw materials are provided by single sources of supply. We seek to mitigate the risk of using single source suppliers by identifying and qualifying alternative suppliers or, for unique materials, by using alternative formulations from other suppliers or by passing price increases on to customers. In some instances, we produce our own raw materials and intermediates.

Prices for some raw materials have increased significantly, particularly caustic soda and sulfuric acid. Prices for others, such as metals and petroleum-based specialty and commodity materials such as resins and solvents have been volatile in recent years. As in many chemical businesses, we consume significant quantities of natural gas in the production of Grace Davison products. World events and other economic factors have caused volatility in the price of natural gas. Increases in the cost of natural gas and raw materials can negatively impact our operating margins. Since we manufacture a substantial portion of our packaging products in developing countries using raw materials from suppliers in the U.S., Europe and other developed economies, currency revaluations versus the U.S. dollar and Euro in developing countries may adversely affect our raw material costs and the prices we may charge for our products.

Grace Construction Products Operating Segment

Our GCP products include specialty construction chemicals and materials. We entered this business in 1954, with our acquisition of the Dewey and Almy Chemical Company.

The following table sets forth GCP sales of similar products as a percentage of Grace total revenue.

	2008		2007		2006	
	Sales	% of Grace Revenue	Sales	% of Grace Revenue	Sales	% of Grace Revenue
			(In millions)			
Specialty Construction Chemicals*	$ 741.3	22.4%	$ 744.3	23.9%	$ 694.0	24.5%
Specialty Building Materials**	407.1	12.3%	361.7	11.6%	335.2	11.9%
Total GCP Revenue	**$1,148.4**	**34.7%**	**$1,106.0**	**35.5%**	**$1,029.2**	**36.4%**

* Includes concrete and cement products.

** Includes vermiculite products.

The following table sets forth GCP sales by region as a percentage of GCP total revenue.

(In millions)	2008 Sales	2008 vs 2007	2007 Sales	2007 vs 2006	2006 Sales
GCP Americas	$ 595.0	1.3%	$ 587.1	(2.4) %	$ 601.4
GCP Europe Africa*	407.1	7.0%	380.6	22.9%	309.6
GCP Asia Pacific	146.3	5.8%	138.3	17.1%	118.2
Total GCP Revenue	**$1,148.4**	**3.8%**	**$1,106.0**	**7.5%**	**$1,029.2**

* Includes the Middle East and India.

We are a supplier to the nonresidential (commercial and infrastructure) construction industry, and to a lesser extent, the residential construction and repair and restoration industries. The following table shows our principal specialty construction chemicals and materials products:

Products	Uses	Customers	Key Brands
Concrete admixtures	Concrete admixtures and polymeric fibers are used to reduce the production and in-place costs of concrete, and improve the life cycle cost of the structure.	Ready-mix and precast concrete producers, engineers and specifiers	ADVA®, STRUX®, PolarSet®, Eclipse®
Additives for cement processing	Cement additives added to the grinding stage of the cement manufacturing process improve the energy efficiency of the plant and enhance the performance of the finished cement. Chromium reducing additives to help cement manufacturers in Europe meet environmental regulations.	Cement manufacturers	CBA®, Synchro®, HEA2®, TDA®
Products for architectural concrete	Products for architectural concrete include surface retarders, coatings, pigments and release agents used by concrete producers and contractors to enhance the surface appearance and aesthetics of concrete.	Precast concrete producers and architects	Pieri®
Admixtures for masonry concrete	Products for masonry concrete are used by block and paver producers for process efficiency and to improve the appearance, durability and water resistance of finished concrete masonry units.	Masonry block manufacturers	Dry-Block®, Optec®, Quantec®
Specialty vermiculite products	Specialty vermiculite products are used in a wide range of applications making use of vermiculite's insulating properties and its ability to absorb nutrients, primarily in the horticultural, construction, and automotive industries.	Manufacturers of a variety of products, including potting soils, animal feeds, brakes, clutches and fire-rated products	MicroLite®, Verxite™, FRSV™
Structural waterproofing, vapor and air barrier systems	Structural waterproofing and air barrier systems prevent water, vapor and/or air infiltration in commercial structures. Products include self-adhered sheet and liquid membranes, joint sealing materials, drainage composites and waterstops.	Architects and structural engineers; specialty waterproofing and general contractors; specialty waterproofing distributors	Bituthene®, Procor®, Preprufe®, Perm-A-Barrier®, Adprufe®

Products	Uses	Customers	Key Brands
Residential building materials	Specialty roofing membranes and flexible flashings for windows, doors, decks and detail areas include fully-adhered roofing underlayments, synthetic underlayments and self-adhered flashing.	Roofing contractors, home builders and remodelers; specialty roofing distributors, lumberyards and home centers; homeowners; architects and specifiers	Ice & Water Shield®, Tri-Flex®, Vycor®
Fire protection and firestop products	Fire protection products are spray-applied to the structural steel frame, encasing and insulating the steel and protecting the building in the event of fire. Firestop products and systems compartmentalize and contain fire and smoke within a building.	Local contractors and specialty subcontractors and applicators; building materials distributors; industrial manufacturers; architects and structural engineers	Monokote®, FlameSafe®

Our GCP operating segment is organized into geographic regions and most product lines, with certain regional variations, are offered in each region. GCP manages its business under a geographic organizational structure that focuses on the following regions:

- *GCP Americas* includes products sold to customers in North, Central and South America;
- *GCP Europe* includes products sold to customers in Eastern and Western Europe, the Middle East, Africa and India; and
- *GCP Asia* includes products sold to customers in Asia (excluding India), Australia and New Zealand.

In view of this diversity of customers and customer concerns, and because specialty construction chemicals and specialty building materials require intensive sales and customer service efforts, we maintain a direct sales and technical support team with sales personnel based in more than 35 countries worldwide. This sales and support team sells products under global contracts, under U.S. or regional contracts, and on a job-by-job basis. We also use distributors in both domestic and overseas markets. We compete globally with several large construction materials suppliers, and regionally and locally with numerous smaller competitors. In recent years, the cement and concrete industry has experienced some consolidation, thereby increasing the importance of servicing global customers. For some customer groups, such as producers and contractors, operational efficiency and total applied cost are key factors in making purchasing decisions, while for others, such as architects and engineers, product performance and design versatility are more important.

Competition for our construction products is based on product performance, technical support and service, and brand name recognition in the construction industry. Our major global specialty construction chemicals competitors are BASF and Sika.

We seek to improve our products, adapt them for new applications and add new products through our innovation growth processes that focus on understanding the needs of the customer, key performance indicators, and marketing research and development. We also seek to extend our product portfolio and geographic reach through acquisitions.

In addition to new product introductions, product enhancements and acquisitions, we look for growth opportunities in developing countries where increasing construction activity, improvement in building codes, and sophistication of construction practices can accelerate demand for our construction products. We continue to expand our commercial and manufacturing capabilities in these geographic areas.

The key raw materials used in our specialty construction products are obtained from a variety of suppliers, including commodity chemical producers, petroleum companies and paper manufacturers. The majority of our raw materials are olefins and organic chemicals; we also make significant purchases of inorganic materials such as gypsum, as well as specialty materials including specialty films, papers, membranes and fibers. In most instances, these materials are available from multiple sources. Global supply and demand factors, currency revaluations against the U.S. dollar and petroleum prices significantly impacted the price and availability of key raw materials in recent years.

The construction business is cyclical in response to economic conditions and construction demand. The construction business is also seasonal and dependent on favorable weather conditions, with a decrease in construction activity during the winter months. Demand for our specialty construction products is primarily impacted by global non-residential construction activity and U.S. residential construction activity. We seek to increase profitability and minimize the impact of cyclical downturns in regional economies by introducing technically advanced high-performance products and expanding geographically. Although in recent years these strategies have been successful in reducing the impact of cyclicality, a decline in U.S. and European construction activity in 2007 and 2008 has had a negative impact on our sales in North America and Western Europe.

FINANCIAL INFORMATION ABOUT INDUSTRY SEGMENTS AND GEOGRAPHIC AREAS

Disclosure of financial information about industry segments and geographic areas for 2008, 2007 and 2006 is provided in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 21 (Operating Segment Information) to the Consolidated Financial Statements which disclosure is incorporated herein by reference. Disclosure of risks attendant to our foreign operations is provided in this Report in Item 1A (Risk Factors).

INTELLECTUAL PROPERTY; RESEARCH ACTIVITIES

Competition in the specialty chemicals and specialty materials industry is often based on technological superiority and innovation. Our ability to maintain our margins and effectively compete with other suppliers depends on our ability to introduce new products based on innovative technology, as well as our ability to obtain patent or other intellectual property protection. Our research and development programs emphasize development of new products and processes, improvement of existing products and processes and application of existing products and processes to new industries and uses. We conduct research in all regions, with North America and Europe accounting for the most activity.

We therefore routinely file applications to obtain world-wide patents to protect our investments in innovation, research, and product development. Numerous patents and patent applications protect our products, formulations, manufacturing processes, equipment, and improvements. We also benefit from the use of trade secret information, including know-how and other proprietary information relating to many of our products and processing technologies. There can be no assurance, however, that our patents, patent applications and precautions to protect trade secrets and know-how will provide sufficient protection for our intellectual property. In addition, other companies may independently develop systems or processes that could circumvent our patents or may acquire patent rights applicable to our business.

Research and development expenses relating to continuing operations amounted to $83 million in 2008, $80 million in 2007 and $66 million in 2006. These amounts include depreciation and amortization expenses related to research and development and expenses incurred in funding external research projects. The amount of research and development expenses relating to government- and customer-sponsored projects (rather than projects that we sponsor) was not material during these periods.

ENVIRONMENTAL, HEALTH AND SAFETY MATTERS

We are subject, along with other manufacturers of specialty chemicals, to stringent regulations under numerous U.S. federal, state and local and EU and other foreign environment, health and safety laws and regulations relating to the generation, storage, handling, discharge, disposition and stewardship of hazardous wastes and other materials. Environmental laws require that certain responsible parties, as defined in the relevant statute, fund remediation actions regardless of legality of original disposal or ownership of a disposal site. We are involved in remediation actions to address hazardous wastes or other materials as required by U.S. federal, state and local and foreign laws. During the Chapter 11 proceeding, we generally are not participating in the funding of investigation and remediation at sites that we do not own. Our ultimate liability with respect to many of these sites will be determined as part of the Chapter 11 proceeding.

We have expended substantial funds to comply with environmental laws and regulations and expect to continue to do so in the future. The following table sets forth our expenditures in the past three years, and our estimated expenditures in 2009 and 2010, for (i) the operation and maintenance of manufacturing facilities and the disposal of wastes; (ii) capital expenditures for environmental control facilities; and (iii) site remediation:

Year	Operation of Facilities and Waste Disposal	Capital Expenditures	Site Remediation
		(in $ millions)	(in $ millions)
	(in $ millions)		
2006	59	8	11
2007	62	9	9
2008	51	5	257*
2009	54	9	16**
2010	56	7	7**

* Includes $252 million payment to the U.S. Government to satisfy all past and future response costs related to the Libby, Montana Superfund Site (excluding the Grace-owned Libby vermiculite mine, see disclosure provided in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 16 (Commitments and Contingent Liabilities) to the Consolidated Financial Statements).

** For 2009 and 2010, amounts are current estimates of ongoing site remediation costs and exclude payments of claims in our Chapter 11 proceeding.

Additional information about our environmental remediation activities is provided in this Report in Item 3 (Legal Proceedings).

We continuously seek to improve our environmental, health and safety performance. To the extent applicable, we extend the basic elements of the American Chemistry Council's Responsible Care® program to all our locations worldwide, embracing specific performance objectives in the key areas of management systems, product stewardship, employee health and safety, community awareness and emergency response, distribution, process safety and pollution prevention. We have

implemented key elements of the new Responsible Care® Security Code for our operations and systems. We have completed a review of our existing security (including cyber-security) vulnerability and have taken actions to enhance our security systems and protect our assets. We have undertaken certain activities to comply with the Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards, including identifying facilities subject to the Standards and conducting Security Vulnerability Assessments as necessary.

EMPLOYEE RELATIONS

As of December 31, 2008, we employed approximately 6,300 persons, of whom approximately 2,900 were employed in the United States. Of our total employees, approximately 3,800 work in Grace Davison facilities, approximately 1,700 work in Grace Construction Products facilities, and approximately 800 are dedicated to corporate activities and/or are shared through globally managed professional groups such as finance and legal services, human resources, information technology, supply chain and environment, health and safety.

Approximately 800 of our manufacturing employees in the United States are represented for collective bargaining purposes by nine different local collective bargaining groups. We have operated without a labor work stoppage for more than 10 years.

We have works councils representing the majority of our European sites serving approximately 1,800 employees.

RISK MANAGEMENT

We have programs in place to address the following significant risks to Grace

- ***Disasters*** —We have disaster recovery plans in effect at key sites, and we have built a certain amount of redundancy into our production plants where feasible. We also have a formalized risk management program, which includes several types and layers of insurance. We are advised by risk management professionals and brokers who are familiar with recent trends in the insurance markets worldwide. The level of insurance carried, and other related aspects such as deductibles, self-insurance levels, etc. are monitored by management on a regular basis.
- ***Environmental*** —We are committed to the heath and safety of all employees and to protecting the environment from damage through the use or production of our products. Our Environment, Health and Safety (EH&S) organization is global in scope and is charged with assuring that we live up to our commitments in this important area. The group performs EH&S audits of our facilities and regularly monitors local laws and regulations. Where appropriate, we use outside consultants and experts to augment our in-house staff. We continue to implement our EHS management system in our facilities worldwide. Our EHS management system is designed to enable us to apply "best practices" and "continual improvement" principles across our business.
- ***Ethics and Fraud*** —We insist that our employees maintain the highest standards of ethical behavior. We have preventative and investigatory programs in place to maintain these standards, as follows:
    - We have established online ethics and compliance training programs in several languages.
    - All U.S. employees and key employees outside the U.S. must sign an annual ethics statement in which they renew their commitment to operate ethically and according to the

Grace code of conduct. They must also report any actual or potential conflicts of interest for evaluation by management and, if necessary, remediation.

- We have an anonymous telephone line to report fraudulent or unethical behavior to our Chief Ethics Officer. The direct line is available to all employees worldwide where local law allows such a facility. Any allegation of fraud is required to be reported to the Audit Committee of the Board of Directors.
- Our Internal Audit Department is independent of management and reports functionally to the Chairman of the Audit Committee of the Board of Directors. The department conducts investigations in collaboration with the Chief Ethics Officer when alleged frauds have accounting, financial reporting or fiscal aspects.
- We provide training to financial personnel in key positions covering topics such as the U.S. Foreign Corrupt Practices Act, the Sarbanes Oxley Act of 2002, and other laws and regulations relating to ethical or legal matters.

AVAILABILITY OF REPORTS AND OTHER DOCUMENTS

We maintain an Internet website at *www.grace.com* . Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports, filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, are available, free of charge, on our website as soon as reasonably practicable after such reports are electronically filed with, or furnished to, the Securities and Exchange Commission, or SEC. These reports may be accessed through our website's investor information page.

In addition, the charters for the Audit, Compensation, Nominating and Governance, and Corporate Responsibility Committees of our Board of Directors, our corporate governance guidelines and code of ethics are available, free of charge, on our website at *www.grace.com/About/Leadership/Governance/* . Printed copies of the charters, governance guidelines and code of ethics may be obtained free of charge by contacting Grace Shareholder Services at 410-531-4167.

The information on our website is not, and shall not be deemed to be, a part of this report or incorporated into any other filings we make with the SEC.

On March 27, 2008, our Chief Executive Officer submitted a certification to the New York Stock Exchange that, as of such date, he was not aware of any violation by Grace of the New York Stock Exchange corporate governance listing standards. Our Chief Executive Officer and Chief Financial Officer have submitted certifications to the SEC pursuant to the Sarbanes Oxley Act of 2002 as exhibits to this Report.

EXECUTIVE OFFICERS

See Part III, Item 10 of this Report for information about our Executive Officers.

Item 1A. RISK FACTORS

This Report, including the Financial Supplement, contains, and our other public communications may contain, projections or other "forward-looking" information, that is, information related to future, not past, events. Such information generally includes the words "believes," "plans," "intends," "targets," "will," "expects," "anticipates," or similar expressions and includes all statements regarding our Chapter 11 proceeding, expected financial position, results of operations, cash flows, financing plans, business strategy, budgets, capital and other expenditures, competitive positions, growth opportunities for existing products, benefits from new technology and cost reduction

initiatives, plans and objectives of management and markets for securities. For these statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. Like other businesses, we are subject to risks and uncertainties that could cause our actual results to differ materially from our projections or that could cause other forward-looking information to prove incorrect. Factors that could cause actual events to materially differ from those contained in the forward-looking statements include those factors set forth below and elsewhere in this Annual Report on Form 10-K. Further, our reported results should not be considered as an indication of our future performance. Readers are cautioned not to place undue reliance on our projections and forward-looking information, which speak only as of the date thereof. We undertake no obligation to publicly release any revisions to the projections and forward-looking information contained in this document, or to update them to reflect events or circumstances occurring after the date of this document.

In addition to general economic, business and market conditions, we are subject to other risks and uncertainties, including, without limitation, the following:

COMPANY RISKS

Our proposed joint plan of reorganization, if confirmed and effective, will substantially impact the value of currently outstanding shares of Grace common stock.

On February 27, 2009, supported by the Official Committee of Equity Security Holders, the Official Committee of Asbestos Personal Injury Claimants and the legal representative of future asbestos personal injury claimants, as co-proponents, we filed an amended proposed joint plan of reorganization, the Joint Plan, with the bankruptcy court that is designed to address all pending and future asbestos-related claims and all other pre-petition claims as outlined therein. The Joint Plan would, if confirmed and effective, substantially impact the value of the ownership interests of holders of currently outstanding Grace common stock. Although it is supported by the parties thereto, other parties-in-interest in our Chapter 11 case have objected to several provisions of the Joint Plan and others may object in the future. As a result, it is possible that the Joint Plan will not be confirmed by the bankruptcy court or the district court or become effective. Further, the effectiveness of the Joint Plan is subject to the fulfillment of numerous conditions that may not ultimately be fulfilled. One of these conditions is that we raise sufficient funds to pay certain claims in cash. We anticipate that we will need approximately $1.0 billion in new financing to fund the Joint Plan. Until the current crisis in the global credit markets more fully abates, traditional debt financing may be unavailable to us on acceptable terms. If we are unable to obtain the necessary financing on acceptable terms, our emergence from Chapter 11 may be delayed. No party currently has exclusive rights to propose a plan of reorganization and solicit votes thereon, so any party-in-interest can propose a competing plan of reorganization at any time. Therefore, until an ultimate plan of reorganization is confirmed and effective, the interests of the holders of Grace common stock remain subject to substantial dilution or cancellation. Accordingly, the value of Grace common stock is highly speculative and any investment in Grace common stock poses a high degree of risk.

If our proposed joint plan of reorganization is not confirmed or does not become effective, the outcome of our Chapter 11 cases could result in the substantial dilution or cancellation of Grace's currently outstanding common stock.

If our proposed joint plan of reorganization is not confirmed or does not become effective, the outcome of our Chapter 11 cases would depend primarily upon the resolution of our asbestos-related and other contingent liabilities. We would likely return to the bankruptcy court estimation trial that was suspended in April 2008 due to the personal injury settlement. We expect that the estimate resulting from this process would form the basis for a plan of reorganization that would provide for the funding of a trust to which all pending and future asbestos-related claims would be channeled. If

the amount of asbestos-related liabilities, as determined through estimation or otherwise, and other liabilities exceeded the assets available for funding, then we likely would issue additional shares of Grace common stock to satisfy such liabilities. The number of shares to be issued could substantially dilute the interests of current shareholders or result in a recapitalization of Grace that would cancel the shares of current shareholders and issue new shares to asbestos and other creditors. Because of this risk of substantial dilution or cancellation, the value of Grace common stock is highly speculative and any investment in Grace common stock poses a high degree of risk.

The bankruptcy process may disrupt our business.

We have attempted to minimize the adverse effect of our Chapter 11 reorganization on our relationships with our employees, suppliers, customers and other parties. Nonetheless, as our reorganization becomes more protracted, our relationships with our customers, suppliers and employees may be adversely impacted and our operations could be materially and adversely affected. In addition, the continuation of our reorganization could negatively affect our ability to attract new employees and retain existing high performing employees.

Chapter 11 limits the flexibility of our management team in running our business.

While we operate our businesses as debtor-in-possession under supervision by the bankruptcy court, we are required to obtain the approval of the bankruptcy court prior to engaging in activities or transactions outside the ordinary course of business. For example, our strategic plan includes the acquisition of businesses in the specialty chemicals industry. Such acquisitions generally require bankruptcy court approval. Bankruptcy court approval of non-ordinary course activities entails preparation and filing of appropriate motions with the bankruptcy court, negotiation with the various creditors' committees and other parties in interest and one or more hearings. The various creditors' committees and other parties in interest may be heard at any bankruptcy court hearing and may raise objections with respect to these motions. This process delays major decisions and limits our ability to respond quickly to opportunities and events in the marketplace. Furthermore, in the event the bankruptcy court does not approve a proposed activity or transaction, we would be prevented from engaging in activities and transactions that we believe are beneficial to Grace.

Our financial statements have not been updated to reflect the terms of the Joint Plan.

Our financial statements reflect accounting for asbestos-related liabilities that is based on the conditions precedent to the amended plan of reorganization that we filed in 2005, the Prior Plan, rather than the Joint Plan. The Prior Plan and the Joint Plan would result in substantially different treatment of our asbestos-related liabilities in our financial statements. When we adjust our accounting based on the Joint Plan or another plan that is filed and/or confirmed, such adjustments could be material to our consolidated financial position and results of operations.

We do not expect to update the proforma and prospective financial information that we filed with the bankruptcy court as an exhibit to the Joint Plan to reflect events that occur after that filing.

We provided proforma and prospective financial information in the exhibits to the Joint Plan filed with the bankruptcy court in compliance with the requirements of the U.S. Bankruptcy Code. That information is not included in or incorporated into this Report. We do not expect to update the Joint Plan proforma and prospective financial information to reflect events that occur after the filing of the Joint Plan with the bankruptcy court unless required to do so by the U.S. Bankruptcy Code or the bankruptcy court. Further, this information is prepared in a format that may not be comparable to information in our financial statements included in this Report or other Reports filed with the SEC. As

a result, investors in Grace common stock should not rely upon the proforma and prospective financial information filed with the bankruptcy court in connection with the Joint Plan.

We may not be able to collect all asbestos-related insurance payments that may be due to us.

We have insurance coverage for a portion of the asbestos-related claims against us. Under the Joint Plan, insurance policies that provide coverage for asbestos-related claims and proceeds, including interest, received after the date of the personal injury settlement, would be assigned to the personal injury trust established under the Joint Plan. We estimate that, assuming an ultimate payout of asbestos-related claims equal to the $1,700 million of asbestos-related liabilities recorded on our balance sheet, we should be entitled to approximately $500 million of insurance recovery. Accordingly, our December 31, 2008 balance sheet includes a long-term asset for estimated asbestos-related insurance of $500 million. Although this amount pertains only to insurance carriers with which we have asbestos settlement agreements, and/or which are currently solvent, we cannot be sure that all these amounts will be collected. We have entered into a settlement agreement with an underwriter of a portion of our excess insurance coverage. The insurer funded an escrow account for the benefit of the holders of claims that currently holds approximately $97.1 million, including interest earned on the account. The settlement agreement provides that unless we confirm a plan of reorganization by December 31, 2008 (which did not happen), at the option of the insurer, exercisable at any time prior to April 30, 2009, the escrow amount with interest must be returned to the insurer. The timing and amount of future payments from our insurers depends on their continued solvency and the resolution of disputes regarding coverage under the insurance policies as well as the nature and timing of actual claims paid. Because of the significance of our future asbestos-related payments, the receipt of timely and complete payments from our insurers will be important to the success of our reorganization. Under the Joint Plan, insurance policies that provide coverage for asbestos-related claims and proceeds from those policies, including interest, received after the date of the personal injury settlement, would be assigned to the personal injury trust established under the Joint Plan.

Grace is currently under criminal indictment in connection with our former vermiculite mining and processing activities in Libby, Montana.

Along with seven former senior level employees (one of whom is now deceased), Grace has been indicted in connection with our former vermiculite mining and processing activities in Libby, Montana. The indictment accuses Grace and the co-defendants of conspiracy to violate environmental laws and obstruct federal agency proceedings, violations of the federal Clean Air Act, and obstruction of justice. According to the U.S. Department of Justice, Grace could be subject to fines in an amount equal to twice the after-tax profit earned from our Libby operations or twice the alleged loss suffered by Libby victims, plus additional amounts for restitution to victims. The indictment alleges that our after-tax profits were $140 million. Grace has categorically denied any criminal wrongdoing and intends to vigorously defend itself at trial. We are unable to assess whether the indictment or any conviction will have a material adverse effect on our results of operations or financial condition or affect our bankruptcy proceedings. The trial commenced on February 19, 2009 and we expect it to last three to four months.

We are subject to environmental clean-up fines, penalties and damage claims that have been and continue to be costly.

Grace is subject to lawsuits and regulatory actions, in connection with current and former operations, for breaches of environmental laws that seek clean-up or other remedies. Grace is also subject to lawsuits and investigations by public and private parties under various environmental laws in connection with our current and former operations in various states, including with respect to off-site disposal at facilities where Grace has been identified as a potentially responsible party under

the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, commonly referred to as CERCLA.

We have established accounting accruals for all environmental matters for which sufficient information is available. As we receive new information, our estimated liability may change materially. We do not have sufficient information to accrue for all of Grace's environmental risks, and we cannot be sure that our actual costs will be equal to or less than our current estimates and accruals. Furthermore, it is reasonably possible that costs associated with those environmental matters for which we have established accruals may exceed our current accruals by material amounts. Some or all of our liability in connection with alleged violations of environmental laws may not be discharged upon confirmation of our proposed plan of reorganization.

Our capital resources are limited and we have limited access to additional financing.

In addition to the cash requirements necessary to fund our ongoing operations, we currently are incurring, and anticipate that we will continue to incur significant professional fees and other restructuring costs in connection with our bankruptcy proceedings. We currently are funding our operations with cash flow from operations, foreign credit facilities that expire on various dates in 2009 in the aggregate amount of approximately $99 million with an aggregate borrowing availability as of December 31, 2008 of $65.6 million and a debtor-in-possession (DIP) loan facility that expires on April 1, 2010 in the aggregate amount of $165 million with a borrowing availability as of December 31, 2008 of $100.9 million. Based on our current and anticipated level of operations, we believe that our cash and short term investments and cash flow from operations are adequate to meet our current and anticipated cash requirements during our Chapter 11 cases. If such amounts are not sufficient to fund operations until a plan of reorganization is confirmed by the bankruptcy court, we may be required to reduce planned capital expenditures or seek additional financing. We anticipate that we will need approximately $1.0 billion in new financing to fund the Joint Plan. Until the current crisis in the global credit markets more fully abates, additional traditional debt financing to fund current operations or to pay claims under the Joint Plan or another plan of reorganization may be unavailable to us on acceptable terms. If we are unable to obtain the necessary financing on acceptable terms, our emergence from Chapter 11 may be delayed. As a result of the uncertainty surrounding our current circumstances, we cannot determine our long-term liquidity requirements or the adequacy of our capital resources until a plan of reorganization is confirmed by the Bankruptcy Court.

We have unfunded and underfunded pension plan liabilities. We will likely require current and future operating cash flow to fund the shortfall. We have no assurance that we will generate sufficient cash flow to satisfy these obligations.

We maintain U.S. and non-U.S. defined benefit pension plans covering employees who meet age and service requirements. Our net pension liability and cost is materially affected by the discount rate used to measure pension obligations, the longevity and actuarial profile of our workforce, the level of plan assets available to fund those obligations and the expected long-term rate of return on plan assets. Significant changes in investment performance or a change in the portfolio mix of invested assets can result in corresponding increases and decreases in the valuation of plan assets, particularly equity securities, or in a change in the expected rate of return on plan assets. For example, our U.S. advance-funded pension plans, which collectively have the largest asset base of our advance-funded plans and a targeted asset allocation of 60% equities and 40% bonds, experienced an overall decline of 26% in 2008. Assets available to fund the pension benefit obligation of the U.S. advance-funded pension plans at December 31, 2008 were approximately $561 million, or approximately $380 million less than the measured pension benefit obligation. In addition, change in the discount rate would result in a significant increase or decrease in the valuation of pension obligations, affecting the reported funded status of our pension plans as well as the net periodic pension cost in the following years. Similarly, changes in the expected return on plan assets can result in significant changes in the net periodic pension cost in the following years.

The international scope of our operations subjects us to the risks of doing business in foreign countries, which could adversely affect our business, financial condition and results of operations.

We conduct a substantial portion of our business outside of the United States, with approximately 68% of our 2008 sales to non-U.S. customers. We currently have many production facilities, research and development facilities and administrative and sales offices located outside North America, including facilities and offices located in Europe, Latin America, Africa and Asia. We expect international sales to continue to represent a significant portion of our revenue. Accordingly, our business is subject to risks related to the differing legal, political, social and regulatory requirements and economic conditions of many jurisdictions. Risks inherent in international operations include the following:

- agreements may be more difficult to enforce and receivables more difficult to collect;
- foreign countries may impose additional withholding taxes or adopt other restrictions on foreign trade or investment, including currency exchange controls;
- we may have difficulty transferring our profits or capital from foreign operations to the United States or other countries where such funds could be more profitably deployed;
- foreign governments may nationalize private enterprises;
- we may experience unexpected adverse changes in export duties, quotas and tariffs and difficulties in obtaining export licenses;
- intellectual property rights may be more difficult to enforce;
- our business and profitability in a particular country could be affected by political or economic repercussions on a domestic, country specific or global level from terrorist activities and the response to such activities; and
- we may be affected by unexpected adverse changes in foreign laws or regulatory requirements.

In addition, certain of our operations are in higher risk regions of the world such as the Middle East and portions of Asia, Africa, Eastern Europe and Latin America. Unanticipated events, such as geopolitical changes, could adversely affect these operations. Our success as a global business will depend, in part, upon our ability to succeed in differing legal, regulatory, economic, social and political conditions by developing, implementing and maintaining policies and strategies that are effective in each location where we do business.

We are exposed to currency exchange rate fluctuations that could impact our profitability.

We are exposed to currency exchange rate risk through our non-U.S. operations. As we conduct a significant portion of our operations outside the United States, fluctuations in currencies of other countries, especially the Euro, may materially affect our operating results. For example, changes in currency exchange rates may affect the relative prices at which we and our competitors sell products in the same region and the cost of materials used in our operations. A substantial portion of our net sales and assets are denominated in currencies other than the U.S. dollar. During times of a strengthening U.S. dollar, at a constant level of business, our reported international sales, earnings, assets and liabilities will be reduced because the foreign currency will translate into fewer U.S. dollars.

In addition to currency translation risks, we incur a currency transaction risk whenever one of our operating subsidiaries enters into either a purchase or a sales transaction using a currency different from the operating subsidiary's functional currency. Given the volatility of exchange rates,

we may not be able to manage our currency transaction and/or translation risks effectively, or volatility in currency exchange rates may expose our financial condition or results of operations to a significant additional risk.

Our ability to use tax deductions to reduce future tax payments may be limited if there is a change in ownership of Grace or if Grace does not generate sufficient U.S. taxable income.

Our ability to use future tax deductions, including net operating losses and deductions for the deferred payments contemplated in the Joint Plan, may be limited by Section 382 of the Internal Revenue Code of 1986, as amended, if we undergo an ownership change as a result of future changes in the ownership of outstanding Grace common stock. In addition, our ability to use future tax deductions is dependant on our ability to generate sufficient future taxable income in the U.S. In order to preserve these future tax deductions, the bankruptcy court has approved trading restrictions on Grace common stock until the effective date of a plan of reorganization. These restrictions prohibit (without the consent of Grace) a person from acquiring more than 4.75% of the outstanding Grace common stock or, for any person already holding more than 4.75%, from increasing such person's holdings. The Joint Plan provides that under certain circumstances, the Board of Directors would have the authority to impose restrictions on the transfer of Grace stock with respect to certain 5% shareholders in order to preserve these future tax deductions.

We may be subject to claims of infringement of the intellectual property rights of others, which could hurt our business.

From time to time, we face infringement claims from our competitors or others alleging that our processes or products infringe on their proprietary technologies. Any claims that our products or processes infringe the intellectual property rights of others, regardless of the merit or resolution of the claims, could cause us to incur significant costs in responding to, defending and resolving the claims, and may divert the efforts and attention of our management and technical personnel from our business. If we are found to be infringing on the proprietary technology of others, we may be liable for damages, and we may be required to change our processes, redesign our products, pay others to use the technology or stop using the technology or producing the infringing product. Even if we ultimately prevail, the existence of the lawsuit could prompt our customers to switch to products that are not the subject of infringement suits.

While Grace is in bankruptcy, we are not permitted to pay dividends on Grace common stock.

We are not permitted to pay dividends on Grace common stock while we are in bankruptcy. Following emergence from bankruptcy, we may be subject to covenants in connection with our financing arrangements that limit or prevent us from paying dividends for the foreseeable future. Furthermore, it is likely that following our emergence from bankruptcy, our board of directors will decide to reinvest our operating cash flow in our business rather than paying dividends. Accordingly, for the foreseeable future, investors in Grace common stock, in all likelihood, will obtain an economic benefit from their shares only by selling them.

INDUSTRY RISKS

Prices for raw materials and energy are volatile; we may not be able to pass through increases in costs and expenses for raw materials and energy which may hurt our profitability.

We use metals, significant amounts of natural gas and petroleum-based materials, including both specialty and commodity materials such as resins and solvents, in the manufacture of our products. Prices and the volatility of prices for these materials have increased significantly in recent

years. To the extent this trend continues and we are unable to pass through increases in raw materials costs to our customers, our operating profit and results of operations may decline.

A substantial portion of our raw materials are commodities whose prices fluctuate as market supply/demand fundamentals change.

We attempt to manage exposure to price volatility of major commodities through:

- long-term supply contracts;
- contracts with customers that permit adjustments for changes in prices of commodity-based materials and energy;
- forward buying programs that layer in our expected requirements systematically over time; and
- limited use of contracts and financial instruments.

Although we regularly assess our exposure to raw material price volatility, we cannot always predict the prospects of volatility and we cannot always cover the risk in a cost effective manner.

We have a policy of maintaining, when available, multiple sources of supply for raw materials. However, certain of our raw materials are provided by single sources of supply. We may not be able to obtain sufficient raw materials due to unforeseen developments that would cause an interruption in supply. Even if we have multiple sources of supply for raw materials, these sources may not make up for the loss of a major supplier.

We spend large amounts of money for environmental compliance in connection with our current and former operations.

As a manufacturer of specialty chemicals and materials, we are subject to stringent regulations under numerous U.S. federal, state, local and foreign environmental, health and safety laws and regulations relating to the generation, storage, handling, discharge, disposition and stewardship of hazardous wastes and other materials. We have expended substantial funds to comply with such laws and regulations. Legislative, regulatory and economic uncertainties make it difficult for us to project future spending for these purposes, and if there is an acceleration in new regulatory requirements, we may be required to expend substantial additional funds to remain in compliance.

The length and depth of product and industry business cycles in our segments may result in periods of reduced sales, operating margins and operating losses.

Our operating segments are sensitive to the cyclical nature of the industries they serve. Our hydroprocessing catalyst product line and other hydroprocessing catalyst suppliers have experienced alternating periods of inadequate capacity and excess capacity for their products. Periods of inadequate capacity, including some due to raw material shortages, have usually resulted in increased selling prices and operating margins. This has often been followed by periods of capacity additions, which have resulted in declining capacity utilization rates, selling prices and operating margins.

Some of our employees are unionized, represented by workers' councils or employed subject to local laws that are less favorable to employers than the laws of the United States.

As of December 31, 2008, we had approximately 6,300 employees worldwide. Approximately 800 of our 2,900 U.S. employees are unionized. In addition, a large number of our employees are employed in countries in which employment laws provide greater bargaining or other rights to employees than the laws of the United States. Such employment rights require us to work

collaboratively with the legal representatives of the employees to effect any changes to labor arrangements. For example, most of our employees in Europe are represented by workers' councils that have co-determination rights on any changes in conditions of employment, including salaries and benefits and staff changes, and may impede efforts to restructure our workforce. Collective bargaining agreements with unions representing employees at several of our facilities are scheduled to expire during 2009 and we expect that they will require renegotiation. Although we believe that we have a good working relationship with our employees, a strike, work stoppage or slowdown by our employees or significant dispute with our employees, whether or not related to these negotiations, could result in a significant disruption of our operations or higher ongoing labor costs.

We work with dangerous materials that can injure our employees, damage our facilities and disrupt our operations.

Some of our operations involve the handling of hazardous materials that may pose the risk of fire, explosion, or the release of hazardous substances. Such events could result from terrorist attacks, natural disasters, or operational failures, and might cause injury or loss of life to our employees and others, environmental contamination, and property damage. These events might cause a temporary shutdown of an affected plant, or portion thereof, and we could be subject to penalties or claims as a result. A disruption of our operations caused by these or other events could have a material adverse effect on our results of operations.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

We operate manufacturing plants and other facilities (including office, warehouse, and other service facilities) throughout the world. Some of these plants and facilities are shared by both of our operating segments. We own all of our major manufacturing plants. Substantially all of our U.S. properties are subject to security interests under our debtor-in-possession borrowing facility. We consider our major operating properties to be in good operating condition and suitable for their current use. We believe that, after taking planned expansion into account, the productive capacity of our plants and other facilities is generally adequate for current operations and foreseeable growth.

Our Grace Davison operating segment operates out of 39 facilities in the following regions:

Region	Number of Facilities
North America	14
Europe	12
Latin America	2
Asia Pacific	11

Our largest Grace Davison facilities are located in Baltimore, Maryland; Lake Charles, Louisiana; and Worms, Germany. Our Grace Davison operating segment also operates sales offices and warehouses in various regions.

Our Grace Construction Products operating segment operates out of 56 facilities in the following regions:

Region	Number of Facilities
North America	23
Europe	13
Latin America	3
Asia Pacific	17

Our largest GCP facilities are located in Cambridge, Massachusetts; Chicago, Illinois; and Slough, England. Because of the nature of our GCP products, GCP requires a greater number of facilities to service our customers than Grace Davison. Also, these facilities are generally smaller and less capital intensive than our Grace Davison facilities. For information on our net properties and equipment by region and country, see disclosure set forth in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 21 (Operating Segment Information) to our Consolidated Financial Statements which disclosure is incorporated herein by reference.

Item 3. LEGAL PROCEEDINGS

CHAPTER 11 PROCEEDINGS

Disclosure provided in this Report in Item 1 (Business) under the caption "Chapter 11 Filing" and in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 1 (Basis of Presentation and Summary of Significant Accounting and Financial Reporting Policies), under the caption "Voluntary Bankruptcy Filing," and Note 2 (Chapter 11—Related Information) to the Consolidated Financial Statements is incorporated herein by reference.

ASBESTOS LITIGATION

Disclosure provided in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 2 (Chapter 11—Related Information) and Note 3 (Asbestos-Related Litigation) to the Consolidated Financial Statements is incorporated herein by reference.

ENVIRONMENTAL INVESTIGATIONS, CLAIMS AND CIVIL PROCEEDINGS

Disclosure provided in this Report in Item 1 (Business) under the caption "Environmental, Health and Safety Matters" and Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 16 (Commitments and Contingent Liabilities), under the caption "Environmental Remediation," to the Consolidated Financial Statements is incorporated herein by reference.

EPA has compiled for investigation a list of 245 facilities, Vermiculite Facilities, that at one time used, stored, or expanded vermiculite concentrate that originated from the Grace Libby vermiculite mine. Included in this list are 50 Vermiculite Facilities that Grace currently operates or formerly operated and 195 Vermiculite Facilities that Grace never owned or operated. Of the 50 Grace Vermiculite Facilities, EPA identified 17 that required remedial action. Grace, EPA, and/or other potentially responsible parties have conducted investigations and/or remedial actions at all of these 17 Grace Vermiculite Facilities. EPA has filed proofs of claim with respect to potential contamination at 11 of the 17 Grace Vermiculite Facilities and three additional Vermiculite Facilities that Grace never owned or operated. EPA's claims with respect to 10 of the 17 Grace Vermiculite Facilities, and the three non-Grace Vermiculite Facilities are to be resolved by the Multi-Site Agreement. EPA's claims with respect to a portion of the remaining Grace Vermiculite Facility in Libby, Montana, are resolved by the EPA Cost Recovery Agreement. Grace has completed remediation activities at a

separate portion of the Libby Vermiculite Facility and is working in cooperation with EPA to investigate the Grace Libby vermiculite mine which constitutes the remainder of the Libby Vermiculite Facility.

In addition, the Agency for Toxic Substances and Disease Registry ("ATSDR") of the Centers for Disease Control and Prevention, an agency of the U.S. Department of Health and Human Services, has conducted health consultations at: (i) 23 of the 50 Grace Vermiculite Facilities; and (ii) an additional five Vermiculite Facilities that Grace never owned or operated. ATSDR has conducted health screenings for current and former Grace employees and their household contacts at four of these locations. The cost of the health consultations are resolved through the Multi-Site Agreement. Grace's estimate of the cost of the health screenings of approximately $3.4 million (including indirect costs) is included in Grace's recorded environmental liability. Although these health consultations and screenings may result in asbestos-related personal injury claims, the proposed joint plan of reorganization provides that all future asbestos-related personal injury claims would be channeled for resolution to an asbestos trust to be established under Section 524(g) of the U.S. Bankruptcy Code.

In February 2000, a purported class action lawsuit was filed in the U.S. District Court for Montana, Missoula Division (*Tennison, et al. v. W. R. Grace & Co., et al* .) against Grace on behalf of all owners of improved private real property situated within 12 miles of Libby, Montana. The action alleges that the class members have suffered harm in the form of environmental contamination and loss of property rights resulting from Grace's former vermiculite mining and processing operations. The complaint seeks remediation, property damages, and punitive damages. This case has been stayed as a result of the Chapter 11 filing. Approximately 85 members of the putative class filed proofs of claim which have been dismissed by the Bankruptcy Court. As described in this Report in Item 8 (Financial Statements and Supplementary Data) under Note 16 (Commitments and Contingent Liabilities) under the caption "Vermiculite Related Matters—EPA Cost Recovery Claim", the EPA has been conducting remediation activities in and around Libby, which include the remediation of private real property and the costs of such remediation activities are covered by the EPA Cost Recovery Agreement.

In October 2000, a purported class action lawsuit was filed in the U.S. District Court for the District of Minnesota, 4 th Division (*Chase v. W. R. Grace & Co.-Conn* .) alleging loss of property values in the vicinity of the former Grace vermiculite expansion plant in Minneapolis, Minnesota. This case has been stayed as a result of the Chapter 11 filing. Approximately 60 members of the putative class filed proofs of claim which have been dismissed by the Bankruptcy Court. The EPA has completed a program for removing suspected vermiculite processing by-products from the former Grace vermiculite expansion plant in Minneapolis, Minnesota, which includes the remediation of private real property. The costs of this EPA program are covered by the Multi-Site Agreement.

MONTANA CRIMINAL PROCEEDING

Disclosure provided in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 16 (Commitments and Contingent Liabilities), under the caption "Vermiculite Related Matters—Montana Criminal Proceeding," to the Consolidated Financial Statements is incorporated herein by reference.

LITIGATION RELATED TO FORMER PACKAGING AND MEDICAL CARE BUSINESSES

Disclosure provided in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 2 (Chapter 11—Related Information), under the caption "Litigation Proceedings in Bankruptcy Court," to the Consolidated Financial Statements is incorporated herein by reference.

TAX CLAIMS

Disclosure provided in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 4 (Income Taxes) to the Consolidated Financial Statements is incorporated herein by reference.

ERISA LAWSUITS

In June 2004, a purported class action complaint (*Evans v. Akers et al.*) was filed in U.S. District Court for the District of Massachusetts against the Grace Board of Directors, certain current and former Grace officers and employees, and others, relating to the Grace 401(k) Savings and Investment Plan, also known as the S&I Plan. The *Evans* complaint alleges that the decline in the price of Grace common stock from July 1999 through February 2004 resulted in significant losses to S&I Plan participants. The *Evans* complaint further alleges that the defendants breached their fiduciary duties under the Employee Retirement Income Security Act of 1974, as amended, or ERISA, by failing to sell or take other appropriate action with regard to Grace common stock held by the S&I Plan during that period, and by failing to disclose to S&I Plan participants the risk of investing in Grace common stock. The *Evans* complaint seeks compensatory damages for the S&I Plan from the defendants. Grace expects that it would have an obligation to indemnify the other defendants for any liability resulting from this litigation. Grace has $50 million of employers' fiduciary liability insurance coverage that Grace believes would be available to pay liabilities arising out of the *Evans* action.

In October 2004, a purported class action complaint (*Bunch et al. v. W. R. Grace & Co. et al.*), also related to the S&I Plan, was filed in the U.S. District Court for the Eastern District of Kentucky against Grace, the Grace Investment and Benefits Committee, the Board of Directors, certain current and former Grace officers and employees, and others. The *Bunch* complaint alleged that Grace and its investment advisors breached fiduciary duties under ERISA by selling Grace common stock from the S&I Plan at a distressed price. The *Bunch* complaint further alleged that Grace breached fiduciary duties under ERISA by hiring State Street Bank and Trust Company, the investment manager for the S&I Plan that Grace retained in December 2003, to rapidly liquidate all of the employees' Grace common stock investment at an artificially low sales price. In 2005, the Kentucky District Court transferred the *Bunch* action to the Massachusetts District Court. In January 2008, the Massachusetts District Court ruled in favor of the defendants in the *Bunch* action, holding that State Street and Grace did not breach their fiduciary duties under ERISA. In February 2008, the *Bunch* plaintiffs appealed to the U.S. Court of Appeals for the First Circuit. In January 2009, the First Circuit upheld the ruling in favor of the defendants.

Since all Grace employees who had interests in the S&I Plan during the relevant periods are members of the purported class of plaintiffs in each of the *Bunch* and *Evans* actions and Messrs. Corcoran, McGowan, Norris, Poling, Shelnitz and Tarola had interests in the S&I Plan during these periods, they have interests in these lawsuits that may be adverse to Grace.

OTHER CLAIMS RECEIVED PRIOR TO THE CHAPTER 11 BAR DATE

Disclosure provided in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 2 (Chapter 11—Related Information) under the caption "Claims Filings" to the Consolidated Financial Statements is incorporated herein by reference.

Item 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

This Item is inapplicable, as no matters were submitted to a vote of our security holders during the fourth quarter of 2008.

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED SHAREHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Except as provided below, the disclosure required by this Item appears in the Financial Supplement, under the heading "Selected Financial Data" opposite the caption "Other Statistics—Common shareholders of record," and in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement in Note 17 (Shareholders' Equtiy (Deficit)) and Note 23 (Quarterly Summary and Statistical Information (Unaudited)), opposite the caption "Market price of common stock," to the Consolidated Financial Statements and is incorporated herein by reference.

SHAREHOLDER RIGHTS AGREEMENT

On March 31, 1998, we paid a dividend of one Preferred Stock Purchase Right on each share of Grace common stock. Subject to our prior redemption for $.01 per right, rights will become exercisable on the earlier of:

- 10 days after an acquiring person, comprised of an individual or group, has acquired beneficial ownership of 20% or more of the outstanding Grace common stock or
- 10 business days (or a later date fixed by the Board of Directors) after an acquiring person commences (or announces the intention to commence) a tender offer or exchange offer for beneficial ownership of 20% or more of the outstanding Grace common stock.

Until these events occur, the rights will automatically trade with the Grace common stock, and separate certificates for the rights will not be distributed. The rights do not have voting or dividend rights.

Generally, each right not owned by an acquiring person:

- will initially entitle the holder to buy from Grace one hundredth of a share of the Grace Junior Participating Preferred Stock, at an exercise price of $100, subject to adjustment;
- will entitle such holder to receive upon exercise, in lieu of shares of Grace junior preferred stock, that number of shares of Grace common stock having a market value of two times the exercise price of the right; and
- may be exchanged by Grace for one share of Grace common stock or one hundredth of a share of Grace junior preferred stock, subject to adjustment.

Generally, if there is an acquiring person and we are acquired, each right not owned by an acquiring person will entitle the holder to buy a number of shares of common stock of the acquiring company having a market value equal to twice the exercise price of the right.

Each share of Grace junior preferred stock will be entitled to a minimum preferential quarterly dividend payment of $1.00 per share but will be entitled to an aggregate dividend equal to 100 times the dividend declared per share of Grace common stock whenever such dividend is declared. In the event of liquidation, holders of Grace junior preferred stock will be entitled to a minimum preferential liquidation payment of $100 per share but will be entitled to an aggregate payment equal to 100 times the payment made per share of Grace common stock. Each share of Grace junior preferred stock will have 100 votes, voting together with the Grace common stock. Finally, in the event of any business combination, each share of Grace junior preferred stock will be entitled to receive an amount equal to 100 times the amount received per share of Grace common stock. These rights are protected by customary antidilution provisions.

The terms of the rights may be amended by the Board of Directors without the consent of the holders of the rights. The rights, which will remain outstanding under the proposed plan of reorganization expire on March 30, 2018.

This summary of the rights does not purport to be complete and is qualified in its entirety by reference to the Rights Agreement, which has been filed with the SEC.

STOCK TRANSFER RESTRICTIONS

In order to preserve significant tax benefits which are subject to elimination or limitation in the event of a change in control (as defined by the Internal Revenue Code) of Grace, the Bankruptcy Court has approved trading restrictions on Grace common stock until the effective date of a plan of reorganization. These restrictions prohibit (without the consent of Grace) a person from acquiring more than 4.75% of the outstanding Grace common stock or, for any person already holding more than 4.75%, from increasing such person's holdings. This summary of the stock transfer restrictions does not purport to be complete and is qualified in its entirety by reference to the order of the Bankruptcy Court, which has been filed with the SEC.

Also, in order to preserve these tax assets in the event of a change in control (as defined by the Internal Revenue Code) of Grace after emergence from Chapter 11, the Joint Plan provides that under certain circumstances, the Board of Directors would have the authority to impose restrictions on the transfer of Grace stock with respect to certain 5% shareholders. These restrictions would generally not limit the ability of a person that holds less than 5% of Grace stock after emergence to either buy or sell stock on the open market.

Item 6. SELECTED FINANCIAL DATA

The disclosure required by this Item appears in the Financial Supplement under the heading "Selected Financial Data" which disclosure is incorporated herein by reference.

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The disclosure required by this Item appears in the Financial Supplement under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations" which disclosure is incorporated herein by reference.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market Risk

Our debt obligations, global operations, the nature of the specialty chemicals production process and the industries in which we engage expose us to various market risks. We utilize derivative financial instruments and derivative commodity instruments to mitigate certain market risks. The following is a discussion of our primary market risk exposures, how those exposures are managed, and certain quantitative data pertaining to our market risk sensitive instruments.

Interest Rate Risk

Interest rate fluctuations directly affect interest expense and cash to be paid out in the form of interest payments on variable-rate debt, and can potentially lead to changes in the market value of the associated variable-rate debt.

We have $500.0 million of outstanding pre-petition variable-rate borrowings under bank credit agreements, and interest is accrued on this debt based on the prime rate. Due to our Chapter 11

filing, interest accrued on pre-petition debt is added to the principal balance. As of December 31, 2008 and 2007, total interest accrued on this debt and added to the $500.0 million principal was $323.5 million and $283.0 million, respectively. If the prime rate were to vary in the near-term by one percentage point, the effect would be to increase or decrease interest expense and accrued interest on outstanding principal by approximately $8.4 million over the twelve-month period ending December 31, 2009.

We also maintain a $165 million debtor-in-possession facility. The interest rate under this facility is based on LIBOR, a variable rate. As of December 31, 2008, no amount was outstanding under this facility, and $100.9 million was available to us, net of letters of credit and holdback provisions.

We do not currently use derivative instruments to attempt to mitigate interest rate risk.

Foreign Currency Exchange Rate Risk

Because we do business in over 40 countries, our results of operations are exposed to fluctuations in foreign exchange rates. We seek to minimize exposure to these fluctuations by matching revenue streams in volatile currencies with expenditures in the same currencies, but it is not always possible to do so. From time to time, we use financial instruments such as foreign currency forward contracts, options, or combinations of the two to reduce the risk of certain specific transactions. However, we do not have a policy of hedging all exposures, because management does not believe that such a level of hedging would be cost-effective, particularly translation exposures that are not expected to affect cash flows in the near-term. Significant uses of derivatives to mitigate the effects of changes in foreign currency exchange rates are as follows:

In May 2004, we purchased forward contracts with a U.S. bank to minimize currency risk related to a Euro-denominated intercompany loan due from one of our German subsidiaries to one of our U.S. subsidiaries. In June 2005, we extended a portion of the forward contract amounts to dates that mature on the dates of the scheduled principal repayments. As part of the contract extension, we were required to pay a settlement premium of $9.3 million to the bank, which was recovered over time as the contracts settled. In 2008, our German subsidiary repaid to the United States the remaining outstanding principal and accrued interest on this intercompany loan, and the associated forward contracts were settled, with full premium recovered. Currency fluctuations on this loan were recorded as a component of operating results.

In November 2007, we executed intercompany loans in the aggregate amount of €250 million (Euros) between our principal U.S. operating subsidiary and a newly established German subsidiary as part of a legal restructuring. In conjunction with the loans, our U.S. subsidiary entered into a series of foreign currency forward contracts in order to fix the dollar/euro exchange rate that will apply to convert euro principal payments under loans to dollars. The forward contracts are aligned with the anticipated payment dates of the intercompany loans, which extend from November 2009 through November 2013. The total amount outstanding under the intercompany loans was €248.9 million as of December 31, 2008 (approximately $345.7 million).

The following tables provide information about our significant foreign currency forward exchange agreements as of December 31, 2008 and 2007, specifically, the notional, or contract, amounts (in millions of U.S. dollars), and weighted average exchange rates (U.S. dollars to Euros) by expected (contractual) maturity dates. These notional amounts generally are used to calculate the contractual payments to be exchanged under the contract. The fair values represent the fair value of the

derivative contracts, and are presented as other assets or other liabilities and allocated between current and non-current, as appropriate, in the Consolidated Balance Sheets.

	Euro Forward Contracts—December 31, 2008 Expected Maturity Date						
Foreign Currency Forward Exchange Agreements	2009	2010	2011	2012	2013	Total	Fair Value
Contract amount	72.7	72.5	72.5	72.6	72.9	363.2	21.0
Average contractual exchange rate	1.45	1.45	1.45	1.45	1.46	1.45	N/A

	Euro Forward Contracts—December 31, 2007 Expected Maturity Date							
Foreign Currency Forward Exchange Agreements	2008	2009	2010	2011	2012	2013	Total	Fair Value
Contract amount	79.1	72.7	72.5	72.5	72.6	72.9	442.3	(11.1)
Average contractual exchange rate	1.28	1.45	1.45	1.45	1.45	1.46	1.42	N/A

Commodity Price Risk

We operate in markets where the prices of raw materials and energy are commonly affected by cyclical movements of the economy and other economic factors. The principal raw materials used in our products include caustic, alumina, rare earths, nickel, aluminum, cobalt carbonate, kaolin, molybdenum, sodium aluminate, sodium silicate, olefins, gypsum, resins, rubber and latices. Natural gas is the largest single energy source that we purchase. These commodities are generally available to be purchased from more than one supplier. In order to minimize the risk of increasing prices on certain raw materials and energy, we use a centralized supply chain organization for procurement in order to improve purchasing activities. We have a risk management committee to review proposals to hedge purchases of raw materials, energy and currency.

We have implemented an energy risk management program under which our goal is to hedge natural gas supply in a way that provides protection against price volatility of the natural gas market. In order to mitigate volatile natural gas prices, we have entered into fixed price swaps to hedge a portion of our 2009 natural gas requirements.

The following tables provide information about our commodity derivatives that are sensitive to changes in commodity prices, specifically natural gas prices. Contract volumes, or notional amounts, are presented in millions of British thermal units (MMBtu), weighted average contract prices are presented in U.S. dollars per MMBtu, and the total contract amount and fair value are presented in millions of U.S. dollars. The fair values represent the fair value of the derivative contracts. The fair value for swaps represents the excess of the variable price (market price) over the fixed price (pay price) multiplied by the nominal contract volumes. The fair value of forward contracts represents the excess of the market value amounts (as quoted on commodity exchanges) over the contract amount. All commodity derivative instruments mature in the subsequent year.

	Commodity Derivatives—December 31, 2008			
Type of Contract	Contract Volumes	Weighted Average Price	Total Contract Amount	Fair Value
Swaps	4.7	8.36	39.5	(10.8)

Type of Contract	Commodity Derivatives—December 31, 2007 Contract Volumes	Weighted Average Price	Total Contract Amount	Fair Value
Swaps	1.8	8.18	14.7	(1.0)

The fair value of commodity swaps and options derivative contracts are presented as other assets or other liabilities and allocated between current and non-current, as appropriate, in the Consolidated Balance Sheets. Our forward contracts for natural gas qualify for the normal purchases and normal sales exception from SFAS No. 133, as they do not contain net settlement provisions, and result in physical delivery of natural gas from suppliers. Therefore, the fair values of these contracts are not recorded in our Consolidated Balance Sheets.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The disclosure required by this Item appears in the Financial Supplement which disclosure is incorporated herein by reference.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Item 9A. CONTROLS AND PROCEDURES

Except as provided below, the disclosure required by this Item appears in the Financial Supplement under the heading "Management's Report on Financial Information and Internal Controls" which disclosure is incorporated herein by reference.

There was no change in Grace's internal control over financial reporting during the quarter ended December 31, 2008 that has materially affected, or is reasonably likely to materially affect, Grace's internal control over financial reporting.

Item 9B. OTHER INFORMATION

None,

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Our current directors and executive officers are listed below. Our Certificate of Incorporation provides for the division of the Board of Directors into three classes, each to serve for a three-year term or until their respective successors are elected. In view of the Chapter 11 filing, the directors are continuing to serve beyond the expiration of their respective terms. Executive officers are elected to serve until the next annual meeting of the Board of Directors or until their respective successors are elected.

Name and Age	Office	First Elected
John F. Akers (74)	Class II Director	5/09/97
H. Furlong Baldwin (77)	Class I Director	1/16/02
Ronald C. Cambre (70)	Class III Director	9/01/98
Alfred E. Festa (49)	Class II Director	9/08/04
	Chairman of the Board	1/1/08
	President and Chief Executive Officer	6/01/05
Marye Anne Fox (61)	Class I Director	5/10/96
John J. Murphy (77)	Class II Director	5/09/97
Paul J. Norris (61)	Class III Director	1/01/99
Christopher J. Steffen (67)	Class I Director	11/01/06
Mark E. Tomkins (53)	Class III Director	9/06/06
Thomas A. Vanderslice (77)	Class I Director and Lead Independent Director	5/10/96
D. Andrew Bonham (48)	Vice President & President, Grace Construction Products	9/11/07
William M. Corcoran (59)	Vice President, Public and Regulatory Affairs	6/01/99
Hudson La Force III (44)	Senior Vice President & Chief Financial Officer	4/01/08
W. Brian McGowan (59)	Senior Vice President, Administration	7/09/98
Gregory E. Poling (53)	Vice President & President, Grace Davison	3/03/05
Mark A. Shelnitz (50)	Vice President, General Counsel & Secretary	4/27/05

Mr. Akers served as Chairman of the Board and Chief Executive Officer of International Business Machines Corporation from 1985 until his retirement in 1993. He is also a director of Lehman Brothers Holdings, Inc.

Mr. Baldwin served as a director of Mercantile Bankshares Corporation from 1970 to 2003, as Chairman of the Board from 1984 to 2003 and as President and Chief Executive Officer from 1976 to 2001. Mr. Baldwin is Chairman of NASDAQ OMX Group, Inc., and is a director of Platinum Underwriters Holdings, Ltd. and Allegheny Energy Inc.

Mr. Cambre is retired Chairman of the Board and CEO of Newmont Mining Corporation. He joined Newmont as Vice Chairman and CEO in 1993 and retired as CEO in 2000 and as Chairman in 2001. He is also a director of Cliffs Natural Resources Inc. and McDermott International, Inc.

Mr. Festa joined Grace in 2003 as President and Chief Operating Officer. He was elected Chief Executive Officer in 2005 and Chairman in January 2008. Prior to joining Grace, Mr. Festa was a partner of Morganthaler Private Equity Partners, a venture capital and buyout firm from 2002 to 2003. From 2000 to 2002, he was with ICG Commerce, Inc., a private company providing on-line procurement services, where he last served as President and Chief Executive Officer. Prior to that, he served as Vice President and General Manager of AlliedSignal's performance fibers business. Mr. Festa is a director of NVR, Inc., a publicly held home builder.

Dr. Fox has been Chancellor of the University of California San Diego and Distinguished Professor of Chemistry at that institution since 2004. She was Chancellor of North Carolina State

University from 1998 to 2004. She is also a director of Boston Scientific Corporation and Red Hat, Inc.

Mr. Murphy served as Chairman of the Board of Dresser Industries, Inc., a supplier of products and technical services to the energy industry, until 1996. From 1997 to 2000, he was a Managing Director of SMG Management L.L.C., a privately owned investment group. Mr. Murphy is also a director of Coastal Energy Company.

Mr. Norris was actively engaged in Grace's business from 1998 until his retirement as Chief Executive Officer in 2005. Since his retirement, Mr. Norris has provided consulting services to Grace. He is also a director of FMC Corporation and Nalco Company and Non-Executive Chairman of Sealy Corp. He performs advisory services for Kohlberg Kravis Roberts & Co., currently the majority shareholder of Sealy Corp.

Mr. Steffen most recently served as Vice Chairman of Citicorp and its principal subsidiary, Citibank N.A. Since his retirement in 1996, he has been a consultant to a number of companies and public accounting firms and served on committees advising the Financial Accounting Standards Board. Mr. Steffen is also a director of Accelrys, Inc., ViaSystems, Inc. and several private companies in which he has an ownership stake.

Mr. Tomkins served as Senior Vice President and Chief Financial Officer of Innovene, a petrochemical and oil refining company that is now part of the INEOS Group, from 2005 until January 2006. He served as CFO of Vulcan Materials Company from 2001 to 2005. Mr. Tomkins is a member of the Board of Directors of CVR Energy, Inc., a publicly held oil refining company and Elevance Renewable Sciences Inc.

Mr. Vanderslice served as Chairman and Chief Executive Officer of M/A-COM, Inc., a designer and manufacturer of radio frequency and microwave components, devices and subsystems for commercial and defense applications, from 1989 until 1995. He is currently a private investor. As Lead Independent Director, Mr. Vanderslice presides at all executive sessions of the Board.

Messrs. Corcoran, McGowan, Poling and Shelnitz have been actively engaged in Grace's business for the past five years. Mr. Poling is a director of Foamex International, Inc.

Mr. Bonham joined Grace in 2005 as Vice President and General Manager of Grace Construction Products' European operations. Prior to joining Grace, he was President and General Manager, from 2004 to 2005, and Vice President and General Manager, from 2002 to 2004, of Invensys Controls Americas. Before joining Invensys Controls, Mr. Bonham held positions of increasing responsibility at General Electric and Honeywell.

Mr. La Force joined Grace in 2008 as Senior Vice President and Chief Financial Officer. Prior to joining Grace, he was Chief Operating Officer and Senior Counselor to the Secretary at the U.S. Department of Education. Prior to entering public service in 2005, Mr. La Force held general management and financial management positions of increasing responsibility at Dell Inc. and AlliedSignal, Inc. (now Honeywell). Mr. La Force is a member of the advisory board of Madison Capital Partners, a Chicago-based private equity firm.

Audit Committee

We have a standing Audit Committee established in accordance with the provisions of the Securities Exchange Act of 1934, as amended. The Committee members are John F. Akers, H. Furlong Baldwin, Ronald C. Cambre, Marye Anne Fox, John J. Murphy, Christopher J. Steffen, Mark E. Tomkins and Thomas A. Vanderslice, each of whom meets the independence standards of the SEC and New York Stock Exchange. Mr. Tomkins serves as Chair of the Audit Committee. The Board of Directors has determined that all Audit Committee members are audit committee financial

experts as defined by SEC regulations. A complete description of the responsibilities of the Audit Committee is set forth in the Grace Audit Committee Charter which is available on the Internet at *www.grace.com/About/Leadership/Governance/*.

Other Committees

We have standing Nominating and Governance, Compensation and Corporate Responsibility Committees. The members of each of these committees are John F. Akers, H. Furlong Baldwin, Ronald C. Cambre, Marye Anne Fox, John J. Murphy, Christopher J. Steffen, Mark E. Tomkins and Thomas A. Vanderslice, each of whom meets the independence standards of the New York Stock Exchange. Mr. Vanderslice serves as Chair of the Nominating and Governance Committee, Mr. Akers serves as Chair of the Compensation Committee and Dr. Fox serves as Chair of the Corporate Responsibility Committee. A complete description of the responsibilities of the Board committees is set forth in their respective committee charters which are available on the Internet at *www.grace.com/About/Leadership/Governance/*.

Section 16(a) Beneficial Ownership Reporting Compliance

Under Section 16 of the Securities Exchange Act of 1934, as amended, our directors, certain of our officers, and beneficial owners of more than 10% of the outstanding Grace common stock are required to file reports with the SEC concerning their ownership of and transactions in Grace common stock or other Grace securities; these persons are also required to furnish us with copies of these reports. Based upon the reports and related information furnished to us, we believe that all such filing requirements were complied with in a timely manner during and with respect to 2008.

Code of Ethics for Principal Officers

The Board of Directors and the Audit Committee have adopted Business Ethics and Conflicts of Interest policies, which apply to all of our directors, officers, and employees, including our principal officers. These policies are accessible through our Internet website, *www.grace.com/About/Leadership/Governance/* and are available in hard copy, free of charge, by contacting Grace Shareholder Services at 410-531-4167. We granted no waivers to these policies during 2008. We intend to promptly post on our website any amendments or waivers to these policies affecting any principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions.

Item 11. EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

Overview

The Board of Directors has designated seven Grace officers (including the five current executive officers named in the Summary Compensation Table) as "executive officers." The executive officers include the Chief Executive Officer (CEO), Chief Financial Officer and vice presidents who are in charge of operating segments or principal functions or who have policy-making authority for Grace. The Board of Directors has delegated authority for administering the compensation program for executive officers and other members of senior management to the Compensation Committee. The Board has appointed all of the independent members of the Board to serve as members of the Compensation Committee.

A complete description of the responsibilities of the Compensation Committee is set forth in the Grace Compensation Committee Charter, which is available on the Internet at *www.grace.com/About/Leadership/Governance/*. The Compensation Committee and the Board review

and revise the charter as necessary. In this Compensation Discussion and Analysis, unless the context otherwise requires, the terms "we", "our" and "the committee" refer to the Compensation Committee.

We are responsible for reviewing and approving all executive officers' compensation, including:

- base salary;
- annual incentive compensation;
- long-term incentive compensation;
- employment agreements;
- severance arrangements;
- change-in-control agreements; and
- any special or supplemental benefits.

We also review and approve all corporate goals and objectives used in determining the incentive compensation of each executive officer. We evaluate each executive officer's performance in light of those goals and objectives and we approve each executive officer's incentive compensation based on this evaluation. In determining the long-term incentive component of an executive officer's compensation, we consider the value of similar incentive awards to executive officers with similar titles at comparable companies and the awards given to the executive officer in previous years. We also approve the annual and long-term incentive programs applicable to other salaried personnel in which the executive officers participate.

We receive advice and legal and administrative assistance from the Grace human resources department and legal services group in meeting our responsibilities. We also have authority to retain advisors from outside of Grace. During 2008, we used the services of Watson Wyatt Worldwide, a human resources consulting firm, and we expect to continue working with Watson Wyatt during 2009. We instructed Watson Wyatt to compile competitive compensation data and, based upon such data, to recommend ranges of annual and long-term compensation that are consistent with our compensation philosophy and objectives as discussed below. We also asked Watson Wyatt to provide suggestions and alternatives regarding the form of various elements of executive compensation. We expect Watson Wyatt and Grace executive officers, including the CEO, General Counsel and Senior Vice President of Administration, and their respective subordinates, to meet, exchange information and otherwise cooperate in the performance of their respective duties outside committee meetings. Watson Wyatt also provides consulting services to Grace in connection with employee benefit plans.

Executive Compensation Philosophy and Objectives

General

The key objective of the Grace executive compensation program is to enable Grace to compete effectively with other firms in attracting, motivating and retaining the executives that Grace needs to ensure its future growth and business success. We intend the incentive compensation portion of the program to align closely the financial interests of Grace executives with those of Grace's stakeholders (including creditors, security holders and others with an interest in the Chapter 11 proceedings). Because senior executives have a substantial ability to influence business success, we believe that the portion of compensation that is at-risk based on corporate performance should increase as the level of responsibility of the executive increases. We also expect the executive compensation programs to be consistent with a culture of ethical conduct, personal integrity and compliance with Grace policies and applicable law. We require executives to set an example for

employees and other Grace business associates in emphasizing the Grace Core Values in their daily business conduct. The Grace Core Values consist of a commitment to teamwork, performance, integrity, speed and innovation, and are the foundation of the Grace corporate culture.

The program is designed to reward executives for the achievement of corporate goals and objectives, taking into account both individual performance and contributions to the success of the overall management team. The individual performance evaluation is based on our assessment of an executive officer's leadership, technical skill, management and operational performance, and potential to contribute to Grace's future success. In evaluating executive officers other than the CEO, we receive substantial input from the CEO. The CEO proposes compensation levels for the other executive officers and, although not a member of the committee, attends our meetings and participates in our deliberations regarding compensation levels for the other executive officers. The CEO is excused from deliberations regarding his own compensation and executive sessions. Although we have not received such a request, at the request of the CEO, we would very likely hold a special meeting of the committee.

Once we have completed an evaluation of an executive's overall performance, we review the executive's existing compensation and compensation potentially payable to the executive. Due to the age and modest value of outstanding stock options held by Grace executives, we have not considered an executive's outstanding equity-based awards in setting future compensation. We then consult with Watson Wyatt for an assessment of the competitiveness of Grace executive officer compensation relative to certain benchmark companies in the chemicals, materials and specialty chemicals industry that we deem our peer group, and relative to certain broad industry data. We selected the benchmark companies as our peer group based upon our judgment regarding the likelihood that they would compete with us for executive talent and the availability of public information regarding their compensation practices. We periodically review the composition of the peer group to ensure that it remains relevant. For 2008, the peer group consisted of:

Albemarle	Hercules
Cabot	International Flavors & Fragrances
Eastman Chemical	PPG Industries
EcoLab	Rohm & Haas
Fuller (H.B.)	Sigma-Aldrich

The broad industry data that we generally review is included in studies produced by Mercer, Towers Perrin, Hewitt and Watson Wyatt for any given compensation year. The chemicals and non-durable goods sections of these surveys were used, in each case, adjusted to reflect Grace's revenues. This data is used as a secondary reference for executive officer compensation, largely as a check on the peer group levels, as well as to determine if there are any identifiable non-industry trends in compensation.

We intend that the annual compensation paid to Grace executives (consisting of salary plus annual incentive compensation) fall within a range that approximates the 50th percentile, and that long-term incentive compensation fall within a range that approximates the 60th percentile, of the practices of the peer group companies and broad industry data when performance objectives are achieved. We selected these percentile targets because they are generally consistent with the historical practices of the peer group. In applying these targets, we do not base our decision on a mathematical analysis of the available data; rather, we use our judgment after considering all available information. If performance objectives are exceeded, we believe that incentive compensation should be above these levels, and when performance objectives are not achieved, incentive compensation should be below these levels. The bias toward incentive compensation reflected in these percentages is in keeping with our intention to align executive and stakeholder interests.

As a result of the Grace Chapter 11 filing in 2001, and the uncertainty with respect to the amount of Grace's asbestos-related liability, we discontinued the use of equity-based compensation, such as stock options, restricted stock and stock appreciation rights, that were traditional elements of our long-term incentive programs. Accordingly, from the Grace Chapter 11 filing to 2008, Grace incentive compensation awards were solely cash-based. In April 2008, Grace reached an agreement in principle with representatives of asbestos personal injury claimants and in September 2008, Grace, with representatives of personal injury claimants and equity security holders, proposed a joint plan of reorganization that is designed to address all pending and future asbestos-related claims and all other pre-Chapter 11 claims as outlined therein. The agreement-in-principle and the joint plan contemplate that outstanding Grace Common Stock will remain outstanding, and that holders of outstanding Grace Common Stock will control Grace, upon Grace's emergence from Chapter 11. Accordingly, we determined that for the 2008-2010 Long-Term Incentive Program, or LTIP, a portion of executive compensation should be directly aligned with the interests of Grace shareholders and that equity-based incentive compensation would best accomplish this objective. We have requested that the Corporate Secretary inform the committee if an executive officer wishes to enter into any transaction involving Grace equity securities.

For purposes of the cash portion of Grace incentive compensation, we believe that income before interest and taxes is generally the best indicator of the performance of the Grace business. Income before interest and taxes includes the factors that the executive team generally has the ability to affect and excludes the cost of capital and tax rates that we believe are generally unrelated to business performance or management control. However, this income measure is significantly affected by other factors that Grace executives are generally unable to influence such as the substantial costs of the Chapter 11 cases, legacy liabilities, income from insurance settlements and pension income and expense. As a result, our performance metric for cash incentive compensation purposes is pre-tax income from core operations (calculated as described in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Summary Financial Information and Metrics" in the Financial Supplement) adjusted to eliminate the effect of: certain unusual or one-time events; changes in pension expense (related to core operations) and LTIP expense from year to year; and, for the LTIP, the effect of major acquisitions or divestments. We generally refer to this performance metric as pre-tax income from core operations as adjusted. Grace core operations are comprised of the financial results of Grace Davison, Grace Construction Products, and the costs of corporate activities that directly or indirectly support their business operations. Excluded from pre-tax income from core operations and pre-tax income from core operations as adjusted are all other events and transactions not directly related to the generation of operating revenue or the support of our core operations.

Chief Executive Officer

Our process for determining the compensation of the CEO is similar to the process we apply to other executive officers. We review and approve corporate goals and objectives used in determining the compensation of the CEO. We evaluate the CEO's performance in light of those goals and objectives and have sole authority to determine the CEO's compensation based on this evaluation subject to the terms of his employment agreement. The terms of the CEO's employment agreement are discussed below in this Compensation Discussion and Analysis and under the Summary Compensation Table and Potential Payments Upon Termination or Change-In-Control Table. The CEO plays no part in our deliberations or approval of his compensation.

We believe the CEO's compensation should be substantially higher than the compensation of other executive officers because the CEO is uniquely positioned to influence all aspects of Grace's operations and performance and the resulting return to our stakeholders. In addition, we believe there exists a robust competition for effective CEO talent among companies the size of Grace and,

in this environment, a competitive compensation package is essential for retention. Our view is consistent with the practices of the peer group companies and the broad industry data that we have reviewed.

Base Salary

To ensure comparability with other companies, as well as consistency and uniformity within Grace, all management positions have been assigned to salary ranges based upon broad industry data. Individual salaries and salary increases for executive officers are set within the salary ranges based on the median annual base salaries paid to individuals who hold comparable positions at the peer group companies, salary levels of peers and subordinates within Grace, individual performance and the amount budgeted for salary increases. Although these factors apply to Mr. Festa, his base salary is also subject to the terms of his employment agreement. Grace executives are generally eligible for annual salary reviews.

For 2008, Grace established a guideline for base salary merit increases applicable to all Grace U.S. salaried employees of 3.7%. Grace determined the amount of the guideline based on a review of projected wage increases in the U.S. chemical industry and certain additional data applicable to the geographic regions in which Grace has its major operations. Base salary merit increases for the Grace executive officers listed in the Summary Compensation Table (other than Mr. Tarola, who left Grace during the year), referred to herein as named executive officers, were generally in line with those of other salaried employees, ranging from 3.8% to 4.7%.

Annual Incentive Compensation

The Annual Incentive Compensation Program, or AICP, is a cash-based pay-for-performance incentive program. Its purpose is to motivate and reward executive officers, and other upper- and middle-level employees, for their contributions to Grace performance and align their financial interests with those of Grace stakeholders by making a significant portion of their annual compensation variable and dependent upon Grace's annual financial performance. The amount of an individual incentive award payment under the AICP is based upon:

- the individual's annual incentive target amount;
- the change in Grace pre-tax earnings from core operations as adjusted; and
- the individual's personal performance.

The AICP targets for the named executive officers (other than Mr. Festa) for 2008 range from 65% to 80% of base salary and actual awards may range from $-0- to an amount equal to twice the target amount, based on business and individual performance. The AICP targets for executive officers are generally set within the target range based on the median annual bonus paid to individuals who hold comparable positions at the peer group companies. Although these factors also apply to Mr. Festa, his AICP target is also subject to the terms of his employment agreement, which requires a minimum AICP target of 100% of base salary. For 2008, Mr. Festa's AICP target is 100% of base salary.

For 2008, the target performance objective was an 8% increase, and the maximum compensable performance objective was a 35% increase, in pre-tax earnings from core operations as adjusted over pre-tax earnings from core operations for 2007. The target performance objective reflects our collective view of good performance by Grace based upon Grace's historical performance and the long-term historical performance of the peer group. Generally, no awards are earned for any year if pre-tax earnings from core operations as adjusted is less than 80% of the prior year's pre-tax earnings from core operations; provided however, that we have discretion to

establish or increase the size of the incentive pool even if performance measures are not achieved. We usually set AICP target awards during the first quarter for the current compensation year.

Based on 2008 operating performance, the aggregate AICP pool was established at 71.4% of the targeted awards. The 2008 AICP payments to the named executive officers ranged from 79% (for Mr. Festa) to 97% of their respective target awards reflecting our view of the respective individual performances of the named executive officers in the context of the challenging economic and, in the case of Mr. Shelnitz, legal environment faced by Grace during 2008.

In recognition of Mr. Tarola's service as Chief Financial Officer, we determined that Mr. Tarola should receive the payment under the 2008 AICP that he would have been entitled to receive had he been employed by Grace on the March 2009 payment date for the AICP, prorated for the three months of 2008 that he served as Chief Financial Officer.

Long-Term Incentive Compensation

The LTIPs are designed to motivate and reward approximately 190 eligible upper-level Grace employees, including the executive officers, for their contributions to Grace performance over a multi-year period and align their financial interests with those of Grace stakeholders by making a significant portion of their total compensation variable and dependent upon Grace's sustained financial performance. The LTIP targets for eligible employees are based on the 60 th percentile of long-term compensation opportunities of individuals who hold comparable positions at the peer group companies (in the case of the executive officers) and broad industry data for other participants.

The Bankruptcy Court has approved the LTIPs for each of the 2006-2008, 2007-2009 and 2008-2010 performance periods. Awards under the 2006 and 2007 LTIPs are payable solely in cash and awards under the 2008 LTIPs are payable in cash and options to purchase Grace Common Stock. Stock options awarded as part of the 2008 LTIP were issued on the terms and conditions of the Grace 2000 Stock Incentive Plan.

Awards under cash-based LTIPs are payable based on the extent to which Grace achieves certain performance targets. These LTIP payouts are based on the compound annual growth in our pre-tax income from core operations as adjusted over the performance period using results for the year prior to the first year of the performance period as the baseline. We generally refer to this growth objective as a CAGR. For cash-based LTIPs, the CAGR objective is 6% and the maximum compensable CAGR objective is 25%. The CAGR objective reflects our collective view of good performance by Grace based upon Grace's historical performance and the long-term historical performance of the peer group. The LTIP target is lower than the AICP target because the LTIPs are designed to incentivize sustained growth over a long-term period, which we believe is generally more difficult to achieve than annual performance targets. The LTIP award payouts may range from $-0- to an amount equal to twice the target amount, based on Grace's operating performance. No award payouts are earned under the cash-based LTIPs if the CAGR for the performance period is zero or negative.

In determining the value of stock option awards, we considered an analysis of stock option value calculated by Watson Wyatt and based, in part, on the Black-Scholes Option Pricing Model. We approved the stock option grants included in the 2008 LTIP on September 11, 2008, after approval of the 2008 LTIP by the Bankruptcy Court on August 26, 2008. The exercise price of the options was $19.71, which was the average of the high and low trading prices of Grace Common Stock on the New York Stock Exchange on September 11, 2008. The stock option component of the 2008-2010 LTIP represented 55% to 66% of the total target LTIP award value for the named executive officers.

In recognition of Mr. Tarola's service as Chief Financial Officer, we determined that Mr. Tarola should receive the payments under the 2006-2008 and 2007-2009 LTIPs that he would have been entitled to receive had he been employed by Grace on the relevant payment dates (March 2009 for the initial payment on the 2007-2009 LTIP and the final payment on the 2006-2008 LTIP and March 2010 for the final payment on the 2007-2009 LTIP). Payments under these LTIPs will be prorated for the portion of the respective performance periods completed as of Mr. Tarola's departure on October 31, 2008.

We believe that the cash-based LTIP awards encourage executive retention because the right to any pending payment under an LTIP is generally subject to forfeiture if the executive ceases employment with us prior to age 62. We generally grant LTIP awards during the first year of the performance period.

Pension Plan/Supplemental Executive Retirement Plan

As described below under "Pension Benefits," payments under Grace's tax-qualified pension plan are calculated using annual compensation, including base salary and AICP awards, and years of credited Grace service. We believe that retirement compensation that increases with increases in years of service and annual compensation is an effective recruiting and retention tool for our employees, including our executive officers. For 2008, federal income tax law limits to $230,000 the annual compensation on which benefits under the tax-qualified pension plan may be based. As a result, we have implemented a Supplemental Executive Retirement Plan, generally referred to as a SERP, that currently applies to approximately 70 upper-level employees, including the executive officers, whose annual compensation exceeds that amount, under which each such employee will receive the full pension to which that employee would be entitled in the absence of the limitations described above and other limitations imposed under federal income tax law. The SERP is unfunded and is not qualified for tax purposes.

Savings and Investment Plan/Replacement Payment Program

We generally offer a tax-qualified 401(k)-type Savings and Investment Plan, or S&I Plan, to employees under which they may save a portion of their annual compensation in investment accounts on a pre- or post- tax basis. Grace currently matches 100% of employee savings under the S&I Plan up to six percent of the employee's base salary and annual incentive compensation. We believe that a 401(k)-type plan with a substantial company match that increases (in dollar amount, not percentage of compensation) with the level of participation in the plan and increases in the employee's annual compensation is an effective recruiting and retention tool for our employees, including our executive officers. For 2008, federal income tax law limits the total contributions, which include an employee's contribution plus the employer's matching contributions, that can be made to an employee's 401(k) plan account to $46,000 and qualifying annual compensation for 401(k) plan purposes to $230,000. As a result, we have implemented an S&I Plan Replacement Payment Program that currently applies to approximately 70 of our employees, including our executive officers, whose annual compensation exceeds $230,000, under which each such employee will receive the full Grace matching payments to which that employee would be entitled in the absence of the limitations described above and other limitations imposed under federal income tax law.

Executive Personal Benefits

We believe that executives generally should not be treated differently than the general employee population when it comes to personal benefits and therefore, we have limited executive personal benefits. Mr. Festa has access to corporate aircraft at Grace expense for reasonable personal travel, though he is responsible for paying income taxes on the value of such travel as determined by the Internal Revenue Service. Due to his overseas assignment in Belgium, Mr. Bonham received certain expatriate benefits that are generally available to all executives that are on overseas assignments. We intend that these benefits compensate Grace's expatriate executives for the additional economic costs they face as a result of their foreign service, including housing costs, higher cost of living, family leave in the U.S., local transportation expenses, children's tuition, foreign income taxes and increases in U.S. taxes caused by such benefits. Mr. Bonham also received certain benefits related to his relocation, at Grace's request, from his former home in Virginia to Massachusetts that are generally available to all employees who relocate at Grace's request.

Change-In-Control Severance Agreements

As described below under "Change-In-Control Severance Agreements," Grace has entered into change-in-control severance agreements with each of the named executive officers. The provisions in these agreements are based on competitive practice and are designed to ensure that the executive officers' interests remain aligned with the interests of the Grace stakeholders if a potential change in control occurs. Payments under these agreements are triggered by the involuntary termination of the executive officer's employment without cause (including constructive termination caused by a material reduction in his or her authority or responsibility or by certain other circumstances) following a "change in control." A change in control situation often undermines an executive officer's job security, and it is to Grace's and its stakeholders' benefit to encourage the Grace executive officers to seek out beneficial transactions and to remain employed through the closing of any transaction, even though their future employment at Grace may be uncertain. The change-in-control severance agreements are designed to reinforce and encourage the continued attention and dedication of the executive officers to their assigned duties without distraction in the face of potentially adverse circumstances arising from the possibility of a change in control of Grace. Certain terms of these agreements are described below under the Potential Payments Upon Termination or Change-In-Control Table.

Severance Arrangements

As described below under "Severance Arrangements," we have entered into severance agreements with each of the named executive officers, other than Mr. Festa, whose severance arrangements are included in his employment agreement, and Mr. Bonham, whose severance arrangements were established by committee approval. Payments under these arrangements are triggered by involuntary termination of employment under most circumstances. The Grace severance arrangements are designed to encourage and reinforce the continued attention and dedication of our executive officers to their assigned duties without undue concern regarding their job security. Certain terms of these agreements are described below under the Potential Payments Upon Termination or Change-In-Control Table.

Executive Salary Protection Plan

As described below under "Executive Salary Protection Plan," our Executive Salary Protection Plan provides payments to our named executive officers, or their respective beneficiaries, in the event of their disability or death prior to age 70 while employed by Grace. The plan is designed to encourage the continued attention and dedication of our executive officers to their assigned duties without undue concern regarding their ability to earn a living and support their families in the event

of death or disability. Certain terms of this plan are described below under the Potential Payments Upon Termination or Change-In-Control Table.

Employment Agreements

Grace has entered into an employment agreement with Mr. Festa pursuant to which he serves as CEO of Grace. Certain terms of this employment agreement are described below under the Summary Compensation Table and Potential Payments Upon Termination or Change-In-Control Table. This agreement was approved by the Bankruptcy Court and was designed to encourage Mr. Festa to accept his appointment as CEO of Grace, remain with Grace and work diligently in pursuit of corporate objectives. Mr. Festa's employment agreement includes a minimum salary and AICP target that were negotiated with Mr. Festa and are based on his business experience, his past performance as Chief Operating Officer of Grace and a competitive analysis of the base salary and annual bonus paid to CEOs at the peer group companies. The agreement also provides for retention payments that have been paid and severance payments that are designed to encourage and reinforce Mr. Festa's continued attention and dedication to his assigned duties without undue concern regarding his job security.

Grace has also entered into an employment agreement with Mr. La Force pursuant to which he serves as CFO of Grace. Certain terms of this employment agreement are described below under the Summary Compensation Table and Potential Payments Upon Termination or Change-In-Control Table. This agreement provides for salary, a signing bonus and AICP and LTIP targets and provisions regarding severance payments. This agreement was negotiated on an arms-length basis prior to the time Mr. La Force joined Grace. The payments required by this agreement were designed to encourage Mr. La Force to join and remain with Grace in lieu of other employment opportunities available to him.

Deductibility of Executive Compensation

Under the Omnibus Budget Reconciliation Act of 1993, provisions were added to the Internal Revenue Code of 1986, as amended, under Section 162(m) that limit the tax deduction for compensation expense in excess of $1 million paid to executive officers unless such compensation is "performance-based" and satisfies certain other conditions. We believe that compensation payable to executive officers should generally meet the conditions required for full deductibility under Section 162(m). Tax deductibility is one criterion we consider when establishing compensation programs. The AICP and LTIPs are structured with the intention that the compensation payable thereunder, with the exception of any discretionary AICP payments or other non-performance-based payments, will qualify as deductible "performance-based" compensation. While we believe that it is important to preserve the ability to structure compensation programs to meet a variety of corporate objectives even if the compensation is not deductible, due to our focus on performance-based compensation plans, we expect that the vast majority of compensation paid to the named executive officers will be tax deductible.

Compensation Committee Report

We, the undersigned members of the Compensation Committee of the Board of Directors of Grace, have reviewed Grace's Compensation Discussion and Analysis for 2008 and have discussed it with Grace management. Based on our review and this discussion, we recommend to the Board that the Compensation Discussion and Analysis be included in Grace's Annual Report on Form 10-K.

COMPENSATION COMMITTEE

John F. Akers, Chair
H. Furlong Baldwin
Ronald C. Cambre
Marye Anne Fox
John J. Murphy
Christopher J. Steffen
Mark E. Tomkins
Thomas A. Vanderslice

Summary Compensation Table

The following table sets forth the compensation we paid for services rendered during the fiscal year ended December 31, 2008 to each individual who served as our Chief Executive Officer or our Chief Financial Officer and each of our other three most highly compensated executive officers who were executive officers as of December 31, 2008, determined by reference to total compensation (reduced by the amount set forth in the table below under the caption "Change in Pension Value and Nonqualified Deferred Compensation Earnings") earned by such individuals for the 2008 fiscal year.

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($)	Option Awards ($)(c)	Non-Equity Incentive Plan Compensation ($) AICP	LTIP(d)	Change in Pension Value and Nonqualified Deferred Compensation Earnings ($)(e)	All Other Compensation ($)(f)	Total ($)
A. E. Festa	2008	921,000	1,000,000(a)	-0-	145,023	725,000	2,433,600	188,000	166,965	5,579,588
Chairman,	2007	862,500	750,000(a)	-0-	-0-	1,375,000	2,399,800	326,000	166,470	5,879,770
President & Chief Executive Officer	2006	789,167	-0-	-0-	-0-	1,250,000	1,502,233	56,000	244,525	3,841,925
H. La Force III*	2008	307,500	250,000(b)	-0-	59,357	225,000	242,500	-0-	15,769	1,100,126
Senior Vice President & Chief Financial Officer										
G. E. Poling	2008	434,667	-0-	-0-	90,097	275,000	880,667	460,000	58,418	2,198,849
Vice President &	2007	412,667	-0-	-0-	-0-	500,000	743,333	560,000	53,342	2,269,342
President Grace Davison	2006	385,000	-0-	-0-	-0-	460,000	771,667	158,000	77,407	1,852,074
D. A. Bonham	2008	370,870	-0-	-0-	51,484	250,000	498,667	53,000	893,683	2,117,704
Vice President & President Grace Construction Products	2007	311,667	-0-	-0-	-0-	360,000	301,765	33,000	488,537	1,494,969
M. A. Shelnitz	2008	354,667	-0-	-0-	53,632	200,000	440,333	172,000	43,173	1,263,805
Vice President, Secretary and General Counsel	2007	336,000	-0-	-0-	-0-	335,000	453,167	237,000	39,957	1,401,124
R. M. Tarola**	2008	370,000	-0-	-0-	-0-	62,000	563,550	328,000	144,358	1,487,908
Former Chief	2007	439,333	-0-	-0-	-0-	440,000	611,833	682,000	58,594	2,231,760
Financial Officer	2006	426,667	-0-	-0-	-0-	460,000	769,500	295,000	101,284	2,052,451

* Mr. La Force was elected Senior Vice President & Chief Financial Officer effective April 1, 2008.

** Mr. Tarola stepped down as Chief Financial Officer on March 31, 2008 and left Grace on October 31, 2008.

(a) Consists of retention payments paid pursuant to Mr. Festa's employment agreement.

(b) Consists of sign-on bonus paid pursuant to Mr. La Force's employment agreement.

(c) Amount represents the dollar amount recognized for financial reporting purposes related to grants of options, without any reduction for risk of forfeiture, calculated in accordance with the provisions of SFAS No. 123(R). We calculate compensation expense related to stock options using the Black-Scholes Option Pricing Model. We amortize compensation expense over the service period and do not adjust the expense based on actual gains or losses or changes in the price of Grace Common Stock after the grant date. The compensation expense in the "Option Awards" column is related to stock options awarded in 2008. The assumptions used to calculate the compensation expense reported for 2008 are described in this Report in Item 8 (Financial Statements and Supplementary Data) in the Financial Supplement under Note 19 (Stock Incentive Plans) to the Consolidated Financial Statements and are incorporated herein by reference.